

**U.S. EPA-Department of State US-Brazil Joint Initiative on Urban Sustainability (JIUS)**

**End of Agreement Report**

**FY 2011-2016**

**Agreement # S-OES-11-IAA-0035**

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## Executive Summary

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This final report details the work of the U.S. Environmental Protection Agency under the EPA-Department of State Inter-Agency Agreement # S-OES-11-IAA-0035 US-Brazil Initiative on Urban Sustainability for the period of June 1, 2011 through July 29, 2016.

On August 16, 2011, the former Brazilian Environmental Minister, Izabella Teixeira and former EPA Administrator Lisa P. Jackson formally launched the U.S.-Brazil Joint Initiative for Urban Sustainability (JIUS) in Rio de Janeiro, Brazil.

The Initiative was intended as platform for the U.S. and Brazil to demonstrate the economic and environmental benefits of a green economy and to highlight the importance of social inclusion and access for underserved communities around the world.

The [ [HYPERLINK "http://www.epa.gov/jius"](http://www.epa.gov/jius) ] was the first major product of the JIUS. The Portal, also known as the JIUS Cookbook, is an interactive, online entry point that assists communities, local officials, developers and investors collaborate on investment in urban sustainability and resilience in cities around the world. EPA Administrator Jackson and Minister Teixeira's representative, Pedro Wilson Guimarães, Secretary of Water Resources and Urban Environment, MMA, launched the JIUS Project Portal on June 20, 2012 at the Rio + 20 Conference.

After the successful launch of the JIUS Project Portal, EPA focused the remainder of the IAA performance period on scaling up implementation of projects or policies listed in the Portal that would impact Rio. EPA identified two project focus areas: strengthening the governance structure for and regulatory management of Guanabara Bay; and promoting community-based solid waste management in underserved communities. These two areas were selected through a collaborative process with the Government of Brazil, the City and State of Rio, the City of Philadelphia, and the U.S. Department of State.

As part of its preparation for the 2016 Olympics, the State of Rio placed a high priority on the cleanup of Guanabara Bay, not only as part of its commitment to the International Olympic Committee but also as an environmental legacy of the games. The IDB and other donors were supporting the construction and revitalization of wastewater infrastructure but no assistance was addressing bay governance. To bridge this gap, EPA facilitated a partnership between the State of Rio and the State of Maryland to share best practices for keeping both the Chesapeake Bay and Rio's Guanabara Bay clean, healthy and sustainable. Supported by a \$1 million technical cooperation grant from the Inter-American Development Bank, the partnership connected the more than three decades of experience Maryland had in restoring the Chesapeake Bay with the challenges that Rio faced with improving the water quality of Guanabara Bay in time for the 2016 Olympics. EPA supported the initial phases of the partnership, providing technical assistance and institutional support related to stakeholder involvement, multi-jurisdictional management, and information systems and tools to build citizen awareness and support for bay cleanup.

The second project area responds to Brazil's 2010 National Solid Waste Policy which aims to decrease the total volume of waste produced nationally and increase the sustainability of solid waste management from the local to the national level. EPA used this policy as a hook for JIUS follow up on solid waste and used it as an opportunity to link policy, projects, and financing in a very concrete manner.

The Instituto Pereiro Passos (IPP), a Rio city government agency and JIUS partner, identified a community-based solid waste management program-- ReciclAção-- in the underserved neighborhood of Prazeres, as a model that could be strengthened and replicated in other areas of the city. ReciclAção's mission is reduce environmental risk and promote community development through the collection and sale of recyclable materials and reinvestment of profits into the community.

Through a series of exchanges and workshops, EPA provided technical assistance and supported the exchange of promising practices on recycling, public participation, and collaborative problem solving. To complement this work, EPA facilitated ReciclAção's engagement with leaders from other vulnerable communities in the U.S. who were successfully engaging their citizens, policy makers, and the private sector in order to reduce environmental risk and build more resilient communities.

EPA also helped the ReciclAção recycling partnership develop a roadmap based on the Community Action for a Renewed Environment (CARE) program in order to help ReciclAção replicate its project model in additional communities in Rio and in other cities in Brazil

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## Introduction

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As the host of both the 2014 World Cup and the 2016 Olympics, Brazil had a unique opportunity to leverage multiple events to push sustainable infrastructure to the top of its national agenda in a manner that supported strong economic growth and promoted sustainable development. From 2011 to 2016, games-related infrastructure investments were anticipated to reach over \$200 billion USD. These investments included: transportation system improvements, port and airport security upgrades, and other major commercial ventures.

In March 2011, President Obama met with then President Rousseff in Brazil where they released a Joint Statement announcing the Joint Initiative on Urban Sustainability (JIUS) between the United States and Brazil. The Statement stressed the importance of investment in a green economy as a means for: generating economic growth, creating decent jobs, eradicating poverty and protecting the environment. The Statement highlighted the role the JUIS could play in addressing these challenges.

The policy dialogue phase of the JIUS was headed by a steering committee that was comprised of U.S. and Brazilian public and private sector decision makers and stakeholders who were responsible for overseeing the work of up to five Portfolio Development Teams (PDTs) and a Financial Advisory Panel (FAP).

Early activities of the Initiative focused on identifying opportunities for greater collaboration with the private sector on green infrastructure and explored innovative financing mechanisms. At the same time, it demonstrated the economic and environmental benefits of a green economy and highlighted the importance of social inclusion and access for less advantaged communities. Benefits include energy efficiency projects that generate revenue and the improvement of air quality that lowers health care related costs. Additionally, JIUS helped identify and create opportunities for investment in green economy-related projects that would not have otherwise been funded.

These policy discussions led to the creation of the JUIS Project Portal and EPA support for pilot projects that could be reapplied in communities in Brazil and the U.S.

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# High Level Policy Dialogue

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## Background

In March 2011, President Obama and President Dilma Rousseff announced the creation of the U.S.-Brazil Joint Initiative on Urban Sustainability (JIUS), an innovative public-private partnership for catalyzing investment in sustainable urban infrastructure and expanding markets for clean technology, products and services.

Minister Izabella Teixeira and EPA Administrator Lisa P. Jackson formally launched the U.S.-Brazil Joint Initiative on Urban Sustainability (JIUS) on August 16, 2011 in Rio de Janeiro, Brazil. The goal of the meeting was to bring together and align key stakeholders and government players to discuss the framework of how the JIUS would move forward.

Across two days of meetings in August 2011, representatives from the U.S. and Brazil agreed that the JIUS presented a transformational opportunity to serve as a platform to facilitate and demonstrate the economic, environmental, and social benefits of increased investment in a greener urban environment. They also agreed that the Brazilian Foundation for Sustainable Development (FBDS), with support from the Rockefeller Foundation, would serve as a facilitator for the JIUS.

## Goal

Participants identified key examples and areas for potential cooperation, including investment in solid waste, water and wastewater, and transportation infrastructure. Participants also agreed that JIUS would focus on Rio de Janeiro and its upcoming mega-events – Rio+20, the 2014 World Cup, and the 2016 Olympics – to identify opportunities for new and innovative green urban infrastructure investment in Rio as a global model for building greener economies and smarter cities.

Overall, JIUS would include two cross-cutting panels that would focus on (1) measuring benefits and capturing the “avoided losses” associated with improved environmental management of cities and (2) identifying financial sources for project investment.

## How was The Goal Achieved?

The Brazilian Foundation for Sustainable Development (FBDS) hosted the first round of working-level JIUS meetings on November 8-9, 2012 in Rio de Janeiro.

These meetings brought together subject matter experts from a wide range of stakeholder groups and focused on four main topic areas: water and sanitation, solid waste and contaminated lands, transportation and urbanization, and green development. Each of these sessions allowed for in-depth discussions on specific topics, based on presentations of existing work underway in Rio including those for the upcoming mega-events, and gave participants the opportunity to identify

additional investments or actions that could address existing environmental, economic and social challenges to shape a broader transition to a green economy.

The second working group meeting in Philadelphia, PA in January 2012 brought together a number of stakeholders from Philadelphia's resource management community and city government as well as technical and financial experts from U.S. EPA, the private sector, and academia. The morning session of the meeting focused on storm water management, while the afternoon focused on waste-to-energy. Participants discussed recent policy and technological progress made in those areas, as well as the potential for additional programs and projects on those topics in the City of Philadelphia. Participants also identified financial challenges as a result of expanded activity in each of those sectors. Through active discussion and sharing of experience, several issues and topics emerged that served as a foundation for future meetings, at both the project level and the leadership level.

Administrator Jackson and Minister Teixeira convened a JIUS Steering Committee Meeting immediately following the January 12 Working Group Meeting, which focused on successful innovations in urban sustainability, particularly for underserved communities, and reached agreement on the product to capture the Policy Dialogue phase of the JIUS. The meeting also provided the City of Philadelphia an opportunity to showcase some of its projects and initiatives to promote urban sustainability – for example the John S. and James L. Knight Green Jobs Training Center, Green Technology and Innovation Clusters, and innovative waste management and community revitalization projects. The meeting concluded with a presentation on discussions of the Working Group Meeting from the previous day and recommendations on the framing of the Steering Committee's final product: the JIUS Project Portal.

The Steering Committee agreed that the final product of the JIUS would be a 1st edition green economy "cookbook" that brings together green economy project "recipes" with key financing "ingredients" and policy "menus" for short- and long-term implementation of city-scale investments in urban sustainability. The Steering Committee set Rio + 20 as the timeframe for the release of the cookbook in print and online. Following the Rio + 20 release, JIUS Steering Committee members planned to create a long-term transition plan for both the JIUS structure and its final products, working with organizations, focused on transferring lessons learned to other cities.

These policy discussions led to the creation of the JIUS Project Portal and EPA support for pilot projects that could be reapplied in communities in Brazil and the U.S.

## **DEVELOPMENT OF THE JIUS PROJECT PORTAL**

### **Background**

The JIUS Project Portal, or Cookbook, was an interactive, online entry point for communities, local officials, developers and investors to help them work together toward investment in urban sustainability and resilience in cities around the world. Following January 2012 JIUS meetings, EPA and City of Philadelphia experts began the Cookbook process by inventorying current or planned activities that, if scaled up, could serve as building blocks for urban sustainability. After determining that list, EPA shared it with Brazilian counterparts in order to select the projects that would be fleshed out in recipe cards. The final product resulted in the JIUS Cookbook and web platform which showcased partnerships and also introduced the Cookbook as a tool for promoting investment in urban sustainability.

(<https://archive.epa.gov/jius/web/html/policy.html>)

### **Goal**

Designed with U.S. and Brazilian partners, the goal of the JIUS Portal or Cookbook, was to enable individuals to identify key links between policy, finance, and projects that can help cities and communities increase investment in urban sustainability. The collection of projects represents the work of key JIUS partners in the U.S. and Brazil and highlights examples of policy instruments, financial mechanisms, and projects from Rio de Janeiro and Philadelphia that can serve as building blocks for other communities.

### **How was the goal achieved?**

Throughout the Cookbook process, EPA provided overall coordination, and content development, review, and verification for U.S. entries into the document. EPA also worked closely with our convening partner in Brazil, the Brazilian Foundation for Sustainable Development (FBDS), to ensure document cohesion and policy relevance and quality. An overview of the steps in the process to create the Cookbook and details on EPA's role in each step in the process are provided below. FBDS coordinated a parallel Cookbook development process in Brazil, working with government agencies, civil society and private sector organizations, academia and multilateral organizations to assemble, review, and vet Brazilian input into the Cookbook. This effort validated the platform's value as a mechanism to bring cities and communities together to exchange ideas and apply lessons learned on green urban infrastructure.

### **Programmatic Results**

EPA took the lead to develop a general framework for a document or "Cookbook" that would identify opportunities for scaling up investment in urban sustainability by capturing these projects and demonstrate their benefits and linkages. EPA designed a template for "recipe cards" that described briefly the policy, project or financial mechanism; provided cross references to other Cookbook entries, offered information on how to apply the project; and listed the anticipated environmental, social, and economic benefits for the entry.



EPA engaged a contractor to help design a virtual knowledge platform that would assemble the information provided by the recipe cards and allow users to select entries based on a variety of categories, for example city, sector, and/or type of benefit. EPA also designed a print version of the Cookbook for a limited release at Rio + 20.

EPA and FBDS convened experts to provide input into the preparation of each card as appropriate, and this team was composed of those who managed or implemented the policy, project, or financial mechanism in question. Each card required the compilation of a series of standard information, including an overview; environmental, economic, and social benefits expected or already demonstrated; and ways to apply the policy, project or financial mechanism.

EPA convened and led the JIUS Policy Group, comprised of EPA experts, to put together EPA submissions and to verify the data in the recipe cards provided by all contributors. This interaction provided the opportunity for everyone to hear and discuss comments or recommendation at the same time and conduct further research to enhance the content of the recipe cards when necessary. EPA also worked with financial experts to prioritize financing options that cities can access from both the public and private markets to facilitate greater investment in urban sustainability projects.

EPA and FBDS developed a final set of recipe cards that would go forward for final review and inclusion in the Rio + 20 version of the Cookbook. EPA and FBDS reviewed the final set of card entries for policy coherence and country balance. Each country also conducted its own internal legal review.

The EPA Administrator and Minister Teixeira's representative, Pedro Wilson Guimarães, Secretary of Water Resources and Urban Environment, MMA, officially launched the JIUS project portal on June 20, 2012 at the Rio + 20 conference. The Administrator emphasized the U.S. commitment to JIUS was undertaken as a shared responsibility aiming to help communities become cleaner, healthier, stronger, and develop ideas that could be replicated throughout the world to lead the way into a sustainable future.

At Rio + 20, EPA and the U.S. Ambassador to Brazil joined a number of leading organizations from around the world to transition the JIUS to a global coalition of partners, including knowledge, implementing and finance, and technical partners who are committed to build on the momentum created by the work of the JIUS over the past two years to increase investment in urban sustainability around the world.

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## Support for Program Implementation and Reapplication

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After the successful development, review and launch of the JIUS Project Portal, EPA then turned to project implementation and reapplication. This was EPA's focus for the remainder of the IAA performance period.

Starting with the leveraged projects announced at Rio + 20, EPA conducted outreach to JIUS partners to identify project areas where EPA expertise could add value. In particular, we looked for projects in the JIUS project categories covered in the Cookbook and that were just starting out or entering a new phase. The projects needed to have a local champion; to have received expressions of interest from the philanthropic community, an investor, and/or private company; and to have the potential for replication in other communities in Brazil. EPA also held consultations with MMA, State of Rio, City of Rio and JIUS NGO partners including FBDS, IETS, and Instituto Pereira Passos (IPP) to discuss project opportunities.

After consultation with partners, and evaluation of the projects, our criteria, and available expertise, EPA identified two projects that could serve as JIUS follow up activities community-based solid waste management and strengthening the governance structure for Guanabara Bay. For a brief time, EPA considered redevelopment of the community surrounding Gramacho Landfill in Rio's neighboring city of Duque de Caxias as a pilot project. After upon further investigation of the expertise needed in that community and the governance of Duque de Caxias, EPA concluded that it would be more appropriate to work with a community in Rio

### **GUANABARA-BAY AND CHESAPEAKE BAY PARTNERSHIP**

#### **Background**

Guanabara Bay's once rich and diversified [ [HYPERLINK "http://en.wikipedia.org/wiki/Ecosystem"](http://en.wikipedia.org/wiki/Ecosystem) \o "Ecosystem" ] has suffered extensive damage in recent decades, particularly along its [ [HYPERLINK "http://en.wikipedia.org/wiki/Mangrove"](http://en.wikipedia.org/wiki/Mangrove) \o "Mangrove" ] areas. The bay has been heavily impacted by [ [HYPERLINK "http://en.wikipedia.org/wiki/Urbanization"](http://en.wikipedia.org/wiki/Urbanization) \o "Urbanization" ], [ [HYPERLINK "http://en.wikipedia.org/wiki/Deforestation"](http://en.wikipedia.org/wiki/Deforestation) \o "Deforestation" ], and [ [HYPERLINK "http://en.wikipedia.org/wiki/Water\\_pollution"](http://en.wikipedia.org/wiki/Water_pollution) \o "Water pollution" ] of its waters with [ [HYPERLINK "http://en.wikipedia.org/wiki/Sewage"](http://en.wikipedia.org/wiki/Sewage) \o "Sewage" ], [ [HYPERLINK "http://en.wikipedia.org/wiki/Waste"](http://en.wikipedia.org/wiki/Waste) \o "Waste" ], and [ [HYPERLINK "http://en.wikipedia.org/wiki/Oil\\_spills"](http://en.wikipedia.org/wiki/Oil_spills) \o "Oil spills" ]. There have been three major [ [HYPERLINK "http://en.wikipedia.org/wiki/Guanabara\\_Bay\\_oil\\_spill"](http://en.wikipedia.org/wiki/Guanabara_Bay_oil_spill) \o "Guanabara Bay oil spill" ]. The most

recent was in 2000 when a leaking underwater pipeline released 1,300,000 liters (340,000 gallons) of oil into the bay destroying large swaths of the [ [HYPERLINK "http://en.wikipedia.org/wiki/Mangrove"](http://en.wikipedia.org/wiki/Mangrove) ] ecosystem. Recovery measures are currently being attempted, but more than a decade after the incident, the mangrove areas have not returned to life. The bay is also adjacent to one of the world's largest landfills, [ [HYPERLINK "http://en.wikipedia.org/wiki/Jardim\\_Gramacho"](http://en.wikipedia.org/wiki/Jardim_Gramacho) ], which was closed in 2012 after 34 years of operation however, leachate from the landfill still flows into the bay.

The EPA worked through the JIUS to facilitate a partnership between the State of Maryland and the State of Rio de Janeiro to develop a governance structure and integrated watershed management program for promoting the clean-up of the Guanabara Bay.

## **Goal**

The goal of the JIUS Chesapeake-Guanabara Bay partnership was to promote opportunities for sustainable urban development in the communities surrounding Guanabara Bay in order to achieve economic, social and environmental benefits, particularly for underserved communities, with a focus on the 2016 Olympics events in Rio.

## **How was this goal achieved?**

In November 2012, Jane Nishida, then the Director of EPA's Office of Regional and Bilateral Affairs, traveled to Rio where she participated in a follow up JIUS roundtable on challenges of Guanabara Bay, organized by FBDS. The purpose of the dialogue was to identify the roles of the institutions involved in bay revitalization and to assess whether the proposed actions and investments in bay preservation would be sufficient to obtain immediate environmental solutions in order to meet Olympic commitments made by the State Government. Expert discussion at the roundtable focused on remediation, and pathways to environmental, technological and institutional solutions used around to improve management of urban watersheds.

Meeting participants included:

- Marlene Ramos, president of the State Environmental Institute (INEA)
- Wagner Victor, president CEDAE
- Israel Klabin, president of FBDS
- Representatives from the Secretary of State for the Environment of Rio de Janeiro (SEA), the Inter-American Development Bank (IDB), and the National Water Agency (ANA)

EPA's presentation focused on the Chesapeake Bay clean-up efforts at the governance structure used to raise public awareness on contamination of the bay involve various stakeholders in its management. Representatives from the IDB saw bay governance as a key challenge for Rio and neighboring cities in the Guanabara Bay watershed and inquired about possibilities for EPA and Maryland collaboration on the topic.

Shortly after Jane Nishida's return from Brazil in November 2012, EPA contacted the Maryland Department of Natural Resources and the Maryland Department of Environment, to discuss the possibility of a Guanabara Bay-Chesapeake Bay partnership given the fact that Maryland has a MOU with the State of Rio. Both the State of Maryland and the State of Rio embraced the partnership idea. These initial discussions led to former Maryland Governor O'Malley's December 2013 trip to Rio to officially launch the partnership, which was funded through a Technical Cooperation grant from IDB.

## **Programmatic Results**

- **May 2013 – U.S. Mission to Guanabara Bay** -- EPA's Office of International and Tribal Affairs Director, Jane Nishida, led a team consisting of the Maryland Secretary of Environment, Robert Summers, and Maryland Director of Natural Resources, Bruce Michael, to Rio de Janeiro in May to discuss the establishment of a Guanabara Bay – Chesapeake Bay Partnership and gain a better understanding of the challenges facing the Guanabara Bay. While in Rio, the team toured the Guanabara Bay and saw firsthand the challenges of untreated wastewater, industrial pollution, commercial shipping, port dredging, destruction of mango swamps, and waste disposal in underserved communities. Rio identified its "Clean Guanabara Project" as its mechanism to fulfill its commitment to begin cleaning the Bay in advance of the 2016 Summer Olympic Games. The project had a projected budget of \$3 billion and consisted of 12 separate state initiatives. Full cleanup would take many years and require the State work closely with local governments, civil society and the private sector, but it was acknowledged that the current governance structure had been ineffective in getting stakeholder support for the cleanup.

Following the workshop, officials from the State of Rio and State of Maryland agreed to develop a Guanabara Bay Program based on the experiences of the Chesapeake Bay Program, which would focus on improving the governance structure and regulatory framework for wastewater management. It was also decided that a delegation from the State of Rio would visit the Chesapeake Bay in July, which would be led by INEA President Marilene Ramos and include representatives from key municipalities surrounding the Guanabara Bay. Representatives from Inter-American Development Bank (IDB) offered to support funding of future activities under the Guanabara Bay – Chesapeake Bay partnership, including travel of Maryland and EPA experts.

- **July-August 2013 - Sharing Lessons from the Chesapeake Bay** -- As a follow up to the May 2013 mission to Rio, EPA collaborated with Maryland partners to organize a Chesapeake Bay Study Tour to familiarize officials from the State of Rio with the Chesapeake Bay situation and to meet with the community and political stakeholders in Maryland. Five specific areas of interest in the Chesapeake Bay were identified: (1) governance structure and role of NGO's and communities in Bay restoration; (2) urban environmental challenges; (3) role of science in environmental decision-making process; (4) public private partnerships in Bay restoration; and (5) communicating challenges and solutions for Bay restoration to stakeholders. The three day study tour of the Chesapeake Bay included meetings with the EPA's Chesapeake Bay Office, the Maryland

Department of Environment, the Maryland Department of Natural Resources, the Maryland Environmental Service, the Maryland Port Authority, the University of Maryland Center for Environmental Science, the Chesapeake Bay Foundation, the South River Federation, the Waterfront Partnership, and the Bay Journal.

Governor Martin O'Malley had a private meeting with the Rio delegation and discussed the importance of political leadership for Bay restoration and government accountability.

The Rio delegation to the Chesapeake Bay Study Tour included:

- Marilene Ramos, President of the [ HYPERLINK "http://www.inea.rj.gov.br/index/index.asp" \t "\_blank" ] (INEA), the State Environmental Institute of Rio de Janeiro
- Gelson Serva, Executive Coordinator of the [ HYPERLINK "http://www.epa.gov/jius/projects/rio\_de\_janeiro/sanitation\_program\_for\_municipalities\_surrounding\_the\_guanabara\_bay.html" \t "\_blank" ] (PSAM)/Rio de Janeiro State Secretariat of Environment (SEA) Joint Initiative with the U.S.
- Axel Graef, [ HYPERLINK "https://en.wikipedia.org/wiki/Niter%C3%B3i" \t "\_blank" ] Vice Mayor
- Zilto Beraldi, [ HYPERLINK "http://en.wikipedia.org/wiki/S%C3%A3o\_Jo%C3%A3o\_de\_Meriti" \t "\_blank" ] Municipal Environmental Secretary
- Jaime Azulay, [ HYPERLINK "http://www.jogosolimpicos2016.com/en/multimedia/guanabara-bay-0" \t "\_blank" ] General Director
- Alexandre Braga – Guanabara Bay Committee Executive Secretary
- Fernando Bretas – [ HYPERLINK "http://www.iadb.org" \t "\_blank" ] (IDB) Project Manager
- Márcio Santa Rosa, PSAM Environmental Technical Consultant

As a result of the study tour, EPA, State of Maryland, and State of Rio partners developed a draft project proposal and workplan of activities for the Guanabara Bay – Chesapeake Bay Partnership which was submitted to IDB for funding. The project proposal consisted of two major components - establishment of a governance structure for the Guanabara Bay and strengthening the regulatory framework for the Guanabara Bay. The proposed activities included institutional analysis of Bay governance structures, technical assistance through workshops and pilot projects, and development of public private partnerships and performance indicators.

- **December 2013 Official Launch of the Guanabara Bay-Chesapeake Bay Partnership in Rio** -- EPA worked closely with the officials from the Governor's Office in Maryland, Maryland Department of Environment, Department of Natural Resources, and Department of Business and Economic Development to leverage Governor O'Malley's trade mission to Brazil, December 4-7, as an opportunity to launch the Guanabara Bay-Chesapeake Bay Partnership with the State of Rio.

Governors Cabral and O'Malley signed the Guanabara Bay – Chesapeake Bay Cooperation Agreement between Governors Cabral and O'Malley on December 4. The City of Niteroi held an official kick off meeting on December 5, where Governor O'Malley spoke with the mayors of the municipalities of Guanabara Bay , and representatives of civil society, communities , NGOs, and academia on the restoration efforts of the Chesapeake Bay Program. The Rio Secretary of State for the Environment (SEA ) and the State Environmental Institute ( INEA ) presented the workplans for recovery of the Guanabara Bay and the Plan of Action under the new cooperation with the Chesapeake Bay. Governor O'Malley's activities concluded with a visit to the Porto Maravilha, or Marvelous Port, where he and local leaders exchanged experiences with revitalization of brownfield sites; and a tour of Guanabara Bay

- **Technical Cooperation Project Funded by IDB --** Based on the draft project proposal and workplan of activities that was developed in July, the State of Rio and IDB have developed a Technical Cooperation Project to support implementation of the Guanabara Bay – Chesapeake Bay partnership. The IDB provided \$1 million in funding support for project implementation beginning in December 2013 through December 2014 (which was delayed and didn't start until February 2015), with an option for one year extension. This funding supported the activities to analyze and improve the Guanabara Bay governance structure and provide technical assistance to strengthen the regulatory management and cleanup of the Guanabara Bay.
- **July 2014, Workshop in Rio de Janeiro—Structuring Governance Model for Environmental Recovery of Guanabara Bay --** From July 28 to July 30, representatives from Rio de Janeiro State, the State of Maryland, the U.S. Environmental Protection Agency (EPA), and the Consulate General participated in a binational workshop on governance structures to enhance the cleanup of Rio's polluted Guanabara Bay. The workshop consisted of a series of stakeholder meetings – each concentrating on a specific group, e.g., the private sector or municipal governments. The PSAM-Sanitation Program for Municipalities Surrounding Guanabara Bay, linked to the Secretary of State for the Environment of Rio de Janeiro (SEA/RJ), was responsible for coordinating the discussions and the proposition of a new Governance Model for the Guanabara Bay, with the various institutions representing the Rio de Janeiro.

The workshop allowed for an exchange of information with NGOs, academia, private and public sector; and provided a platform to exchange information between the U.S. delegation and representatives of the State Government of Rio de Janeiro and invited participants. Themes discussed included an overview of the water quality of Guanabara Bay; the role of federal, state and local governments; engagement of NGOs, and the private sector. The exchange of information included scenarios for the new governance structure of Guanabara Bay and an overview of planned technical cooperation with IDB.

A new State of Rio Administration coupled with Brazil's deepening economic crises had negative impacts on the partnership and City of Rio and State of Rio commitments to reduce wastewater flows into the Guanabara Bay by 80%. Beginning in early 2015, City and State officials began stating publicly that the 80% wastewater reduction target agreed to earlier to win

the 2016 Olympics could not be met. Meeting this goal would take several years. With the Olympics in less than 18 months, Rio State changed its focus to making Guanabara Bay appropriate for Olympic sailing events, by preventing trash from entering the bay and using in-river treatment using River Treatment Units (UTRs in Portuguese) instead of relying solely on sanitation infrastructure improvements. In addition, Rio used eco-barriers (booms) and eco-boats to collect the litter and debris in the Bay. City and State of Rio officials investigated the use of the Waterwheel Trash Interceptor technology, which had been deployed successfully in Baltimore Harbor. The State of Rio was very interested in acquiring the technology for use in the GB. KCI Technologies, a Maryland environmental consulting firm, partnered with the creator of the Waterwheel to identify appropriate locations for deployment of the technology, found a local company that could manufacture it, and established the methodology to test the technology in 1 tributary of the Guanabara Bay. While the State of Rio had plans to deploy at least 6 additional Waterwheels on larger tributaries to the bay, budget constraints led to testing delays and, finally, cancellation.

## **COMMUNITY- BASED SOLID WASTE MANAGEMENT**

### **Background**

In 2013, Instituto Pereiro Passos (IPP), a City of Rio government agency responsible for building partnerships to deliver services to underserved communities, identified a community-based solid waste management model program—ReciclAção (or Recycle-Action in English) -- in the community of Prazeres as a model project that could be strengthened and replicated in other communities. Through community mobilization, the ReciclAção project works to facilitate the donation of recyclable materials discarded by residents and local partners into collection stations. The materials are then resold for a profit. The revenue generated from the sale of these materials will be used to maintain the operation of ReciclAção and to invest in education projects, reducing the trash in the community, and creating collaborative efforts to improve the community, such as parks and paths, and environmental education. The ReciclAção project was initiated following a 2010 tragedy in the Prazeres community, when heavy rains and open trash piles lead to a landslide killing 34 people and leaving over 355 residents homeless. The ReciclAção partnership, composed of local government agencies, NGOs, academia, and private sector representatives, is working to create a model to build social and climate resilience by controlling materials that create health risks and damage property. EPA worked with ReciclAção to strengthen the project and to develop the program into a model that can be replicated in domestic and international communities.

### **Goal**

The goals of the community-based solid waste management work were to: promote and demonstrate environmental risk reduction in underserved communities, such as Rio de Janeiro's favelas, by demonstrating collaborative problem solving approaches with social, economic, and

environmental benefits; and promote the reapplication of successful models in additional communities in Rio and in other cities in the U.S. and Brazil.

### **How was this Goal Achieved?**

During her November 2012 visit to Rio, Acting Assistant Administrator Jane Nishida held a series of meetings with JIUS partners and representatives of potential solid waste management pilot projects to determine the feasibility of collaboration. She focused on opportunities in Duque de Caxias, just outside the City of Rio where the Gramacho landfill is located, and in Rio itself.

In Duque de Caxias, she visited the Gramacho landfill and met with informal recycling cooperatives and the FAETEC training center, a State of Rio agency that has a program to provide training for informal recyclers in masonry, carpentry, electrical work, and plumbing. Representatives from the Institute for Labor and Society (IETS) presented information on an assessment underway to identify the feasibility of bringing an e-waste facility to the community surrounding the Gramacho landfill as an opportunity for economic development. Meetings with the State of Rio, officials expressed interest in collaborating with EPA on green zones for sustainable communities surrounding the Gramacho landfills.

In Rio, she met with COMLURB, the Rio Municipal Urban Sanitation Company, to learn about plans to implement the Solid Waste National Policy. She also met with senior officials at the Pereira Passos Institute (IPP), a City of Rio urban planning and statistics agency that is responsible for special projects, entrepreneurial development, and strategic economic development that respond to the needs in these underserved communities. IPP expressed an interest in collaborating with EPA in the development of a demonstration community level pilot project to improve solid waste management in a Rio favela. This partnership with IPP set the course for EPA's work on community-based solid waste management.

### **Programmatic Results**

- **July 8-12, 2013 -Community-based Solid Waste Management Workshop and Community Dialogue** – The project began with a multi-stakeholder workshop and dialogue meeting, July 8 – 12, 2013 that addressed social and technical issues associated with solid waste management in Rio. It also engaged a subset of meeting participants in the design of a solid waste management demonstration project in a Rio community. EPA shared solutions and provided information to the City of Rio and civil society for the implementation of the demonstration project. IPP invited other municipalities to observe the implementation process and intends to invite the cities of Sao Paulo, Recife, and Curitiba (all cities that will host World Cup games in 2014) to share their best practices.

Using COMLURB's new waste management initiative Projeto Comunidade Limpa (Clean Community Project) as a starting point, the project looked for a recently-pacified favela in which to engage local community members in the identification of infrastructure and service needs and to develop partnerships to enhance and scale up project implementation to meet these needs, with a special emphasis on collection, recycling, and community awareness. IPP identified a recently-launched project in the Prazeres



community as a promising project for replication. When EPA met with ReciclAção partners, their first priority was to strengthen the project and ensure its success and then discuss options for reapplication.

- **Relationship Building with ReciclAção** – As the first non-Brazilian organization that expressed an interest in working with ReciclAção, EPA was a test case for how this partnership, with a wide variety of members, could work with a foreign government agency. Every step in the project planning, development, and execution process took extra time as EPA and ReciclAção determined their expectations and rules for engagement
- **Inventory of U.S.-Community Projects Relevant to ReciclAção** -- EPA developed an inventory of 15 past or current EPA community-level projects or tools that we could use to develop a work plan for EPA technical assistance to ReciclAção. When putting the inventory together, we looked for successful U.S. projects and activities that could be relevant to ongoing ReciclAção activities. While not all of the issues facing the communities listed in the inventory were identical to those facing Prazeres, they have some very important things in common, for example similar community demographics, capacity building needs, or recycling strategies. Examples of projects included: Earth Force Trash Survey; Case Studies of Seven Rural Programs Cooperatively Marketing Recyclables, and Recycling Measurement Tools. ReciclAção partners reviewed the inventory and identified projects being carried out in the Village of Arts and Humanities (VAH) in Philadelphia as the match to ReciclAção's needs.
- **Virtual Exchanges with VAH** – EPA organized two virtual exchanges between ReciclAção and the North Philadelphia Village of Arts and Humanities (VAH), a U.S. community-based project that is working successfully to address similar challenges in the areas of solid waste management, environmental justice, and community development. These exchanges provided ReciclAção and VAH opportunities to learn more about the other projects and see
- **August 31-September 4, 2015: The Philly-Rio Experience: An Interactive Seminar on Driving Sustainable Community Development by Reducing Environmental Risk** -- EPA efforts with ReciclAção focused on the development and execution of a seminar entitled: "The Philly-Rio Experience: Driving Community Sustainable Development by Reducing Environmental Risk," which took place from August 31st – September 4th, in Philadelphia, PA. The Seminar provided a platform for a more in-depth exchange of successfully applied best practices, strategies, and tools used by VAH and ReciclAção in the areas of developing partnerships; engaging the community, particularly youth; promoting project sustainability and job training, strengthening public participation in environmental decision making; and impacting public policies related to solid waste management and community development. It also provided representatives from both communities the opportunity to engage with leaders from other vulnerable communities in the U.S. who were successfully engaging their citizens, policy makers, and the private sector in order to reduce environmental risk and build more resilient communities.

The delegation visited a recycling facility in Camden, NJ to see how a mid-sized recycling company that collected plastics, paper, and other materials operates in the U.S.; participated in a panel to share strategies and experiences working to develop public policy; met with a recycling expert who had conducted an assessment of ReciclAção recycling equipment needs, briefed ReciclAção members on the results of his analysis and presented options for equipment purchase. Lastly, ReciclAção, VAH, EPA, SUNY, and Syracuse met to identify key conclusions for the week and replicable strategies and practices.

- **The Philly-Rio SharePoint Site** -- In preparation for the Philly-Rio Seminar, developed a SharePoint site to facilitate information exchange between ReciclAção and VAH in the lead up to the seminar. Following the seminar, EPA realized that the site could not only capture all of the information and technical assistance provided to the two organizations from EPA and other organizations, but it could also serve as a tool for ongoing networking and exchange among organizations that participated in the seminar. This site tells the story of this collaboration, provides comprehensive background on all involved, contains pictures, and, hopefully, will allow the organizations involved to continue their interaction. EPA continued refinement of this site over this performance period and invited limited viewing by ReciclAção and the Philadelphia Village of Arts and Humanities (VAH). This was an important step in continuing follow up and facilitating next steps in the Philly-Rio collaboration process. EPA intends to open the SharePoint site to everyone who participated in the Philly-Rio seminar
- **November –December 2015 – Moving from Implementation to Reapplication** -- ReciclAção convened a one day seminar to promote reflection on ReciclAção's successes, opportunities for methodological improvement, and challenges for project reapplication. Leaders from several communities, two invited specialists (a lawyer and an economist), and many members from the ReciclAção Working Group (Brasil Foods Foundation, BrasilPet recycling company, Prazeres community leaders, CEDAPS) participated. The major takeaway was the interest in some Rio communities – including Borel (that already has a recycling initiative), Guararapes (where the community struggles with environmental problems), and other communities of the Prazeres/Escondidinho Complex – in reapplying the ReciclAção methodology. These findings changed the course for EPA technical assistance to ReciclAção.

ReciclAção indicated that it was very interested in learning more about the EPA Community Action for a Renewed Environment, or CARE, model and using it to capture ReciclAção's methodology for reapplication in other Rio communities. ReciclAção requested that EPA work to transfer to them the CARE model so that the Prazeres community could use it to develop its process and documents for reapplication and to develop a train the trainer course to prepare Prazeres representatives to become mentors for other communities that want adopt the ReciclAção methodology.

- **April 2016 - Virtual Briefing on the CARE Model and Application to the Reapplication of the ReciclAção Methodology** -- EPA held a virtual briefing for

Reciclação on the application of the EPA CARE model to the Reciclação methodology. The CARE program—which is no longer funded— was developed by EPA to work with communities to help them work collaboratively to identify their priority environmental risks, develop multisector partnerships to reduce these risks, and empower communities to become stewards of their own environment.

The CARE Program uses a roadmap that provides communities with a process to: learn about local environmental and environmental health risks and impacts; build the community consensus necessary to take effective action; mobilize a community partnership to take action to reduce impacts and risks; and build long-term capacity within a community to understand and reduce environmental impacts and risks. The CARE roadmap incorporates the perspective of the U.S. National Environmental Justice Advisory Council (NEJAC) report on ensuring risk reduction in communities with multiple stressors and EPA's Framework for Cumulative Risk Assessment. It also incorporates and builds on the Community Environmental Health Assessment Workbook published by the Environmental Law Institute.

Reciclação felt it could not only use the CARE roadmap to reapply the Reciclação model but also help build multi-stakeholder partnerships to leverage resources to address problems identified by communities. In the U.S., these partnerships have been an important part of leveraging resources and investments for program sustainability.

- **June 2016 - Development of CARE Roadmap and Documentation for Replication of Reciclação Model in other Communities** -- In June 2016, EPA facilitated and participated in a seminar in Rio focused on the development of products including a roadmap based on the Community Action for a Renewed Environment (CARE) program to help the group replicate its project model in other communities and worked with project leaders who can reapply the Reciclação model in other Rio communities. (see Appendix)

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## JIUS Leveraging Opportunities and Building on Lessons Learned

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The JIUS convening process gave visibility to nascent project ideas in Rio and Philadelphia, provided a forum for their discussion, and an opportunity for matching these ideas with potential funders and champions to further their development. Many of these successfully-matched/JIUS-related projects were announced at Rio + 20. They included:

- Jonathan Rose & Co., a New York City based green developer signed a letter of cooperation with the Rio-based Institute for the Study of Labor and Society (IETS) to develop an investment grade master plan for the redevelopment of the Gramacho Landfill and Jardim Gramacho district in the Rio de Janeiro metropolitan area. Some of the development priorities include green buildings and affordable housing, renewable energy and electricity, transit and efficient water and waste networks, as well as a job training center and key employment anchor for displaced waste pickers, such as a state-of-the-art electronic waste recycling facility and/or a sustainable construction materials management facility. Jonathan Rose & Co is contributing \$200,000 to this effort.
- Through the JIUS, EKO Asset Management Partners, the Natural Resources Defense Council (NRDC) and CH2MHill with support from the Rockefeller Foundation have created a new “Natural Infrastructure Lab” or NatLab (Natural Infrastructure Innovative Financing Lab). The NatLab is an innovative platform to accelerate the development of financial instruments that support investments in green infrastructure retrofits on public and private property. The first “NatLab” pilot will catalyze private capital investments to preserve and restore natural infrastructure in Philadelphia to address overflow and runoff from stormwater and improve water quality while also stimulating green economic growth. The Rockefeller contribution towards this effort is \$500,000.
- In addition, The Rockefeller Foundation provided a \$500,000 grant to the Brazilian Foundation for Sustainable Development (FBDS) that allows the organization to serve as the JIUS in-country facilitator among the partners which included the three levels of government in Brazil—local, state and Federal—, academia, NGO’s and private sector.
- The Inter-American Development Bank provided a grant (\$250,000) to the State of Rio de Janeiro to create a project management unit for the development and implementation of a series of new green districts. The first of these is a Green Technology Park with GE and L’Oreal at the Ilha do Bom Jesus.

Together, these JIUS-related projects leveraged approximately \$950,000 worth of initial green investment projects and other activities that lead to the mitigation of the release of greenhouse gases and the promotion of resilient cities through the growth of greener economies. As these projects develop, we expect additional leveraging and investment opportunities.

During the JIUS project implementation phase, the Inter-American Development Bank issued a \$1,000,000 grant to the State of Rio to help support the Guanabara Bay-Chesapeake Bay partnership. This brings the amount leveraged to over \$1.95 million.

In addition to projects, the JIUS leveraged opportunities to transfer the policies, projects, and financing mechanisms documented in the JIUS Cookbook to other cities around the world to create a more robust knowledge base that can be used globally by governments, communities, investors, and developers to promote urban sustainability:

- Mayor of New York, Michael Bloomberg, announced a formal cooperation between EPA and C40 to adopt and extend the JIUS interactive web platform to all C40 cities and to highlight links between policy, financing, and sustainable infrastructure projects on the ground. C40 Cities Climate Leadership Group is a network of engaged mega-cities from around the world committed to reducing GHGs through the implementation of meaningful, measurable, replicable and sustainable climate-related policies locally that will help address climate change globally. Through this cooperation, C40 adapted the design and coding of the JIUS Cookbook to integrate with the C40 Cities website “look and feel” and worked with C40 Cities to collect additional policy, finance, and project case studies and best practices for incorporation into a C40 database.
- The Rockefeller Foundation, a core JIUS supporter, announced that it would extend the JIUS model to other cities through the Asia Cities Climate Change Resilience Network. This concept supported development of the Rockefeller 100 Resilient Cities Program, which announced its last tranche of member cities in May 2016.

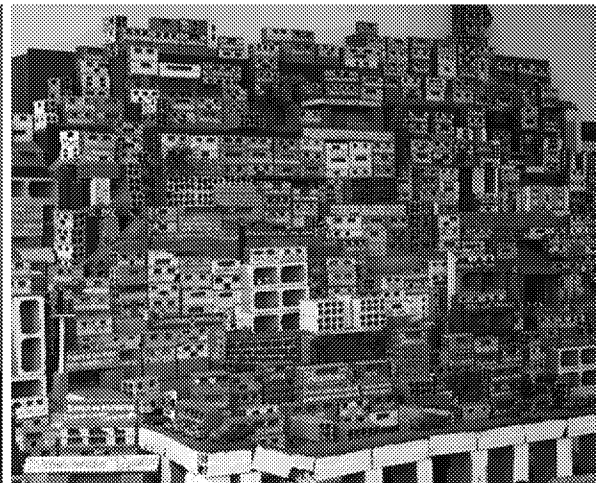
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## Appendix: Documents Produced Since the Last Report

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SYSTEMIZATION AND DEVELOPMENT OF RECICLAÇÃO PROGRAM WORKSHOP  
June 20-24, 2016

Rio de Janeiro, Brazil



# Systemization and Development of Reciclação Program Workshop

**June 20-24, 2016**

**Rio de Janeiro, Brazil**

## **SUMMARY REPORT**

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## Program Overview

The Reciclação Program Workshop held in Rio de Janeiro June 20-23, 2016 was developed to introduce the United States Environmental Protection Agency's (US EPA) Community Action for a Renewed Environment (CARE) Program for reapplication in Brazil. The Reciclação Program was started in 2010 through Prevenção Realizada com Organização e Amor (Grupo PROA). Grupo PROA has been very successful in partnering with other organizations in Brazil and around the world to promote health and environmental issues in the Morro dos Prazeres community of Rio de Janeiro. Grupo PROA was founded to address health issues in the Morro dos Prazeres community, but as the issue of waste came to the forefront of Grupo PROA's efforts, it partnered with Brazil's Center for Health Promotion (CEDAPS) and Brazil Foods (BRF).

These three organizations focus on public health, and in the Morro dos Prazeres community, accumulated waste has become a public health issue. CEDAPS became involved in the community as a result of its mission to address all types of public health issues in Brazil. BRF is a Reciclação Program partner through its Institute, a branch of the company which works in the communities where BRF operates its factories. The goal of the Institute is to work with communities to introduce and improve programs that will benefit the overall health and wellbeing of the community. The Reciclação Program was developed specifically in Morro dos Prazeres to find solutions for the large amount of waste that had accumulated in the community. Together, these three organizations, along with a number of other public and private partners, continue to work toward a cleaner environment in Morro dos Prazeres.

The success of the Reciclação Program in Morro dos Prazeres drove the partners to develop a model that could be reapplied to other communities around Brazil. CEDAPS considered a number of different community partnership programs to find one that could be used to establish a model. US EPA's CARE Program matched well with the work the partnership had been conducting and the Reciclação partnership wanted to develop the CARE Program model in conjunction with the Reciclação Program for reapplication in Brazil.

CEDAPS asked US EPA to participate in the June 2016 Workshop to introduce the CARE Program in Brazil and contribute to the development of a model that incorporates the CARE Program's 10-step process with the principles and expertise of the Reciclação Program. Participants at the Workshop included US EPA partners who worked on the CARE Program in the US EPA Office of Environmental Justice, CEDAPS leadership, BRF Institute employees who are working in various communities around Brazil, Grupo PROA employees and volunteers, Reciclação Program members who developed the recycling and waste reduction program, and community members from Morro dos Prazeres and other neighborhoods in Rio de Janeiro who are working on community development through recycling and trash reduction.

All of these partners came together to learn about the 10-Step CARE Program and the Reciclação Program with the goal of combining and adapting the two models for reapplication in other communities in Brazil.

## Program Partners Overview

**US Environmental Protection Agency Office of International and Tribal Affairs (US EPA OITA):** US EPA OITA oversees efforts to strengthen and implement public participation in environmental decision-making and other activities conducted in Brazil.

**CSRA:** CSRA was awarded funds from US EPA OITA to help support the workshop by organizing logistics and providing onsite support of this project.

**Reciclação Program:** The Reciclação Program was developed in Morro dos Prazeres, Rio de Janeiro, Brazil by Grupo PROA and its partners. It is a project designed to recycle a large portion of solid wastes in the community and to generate money from the sale of recyclables to fund environmental risk reductions and community improvements, including public participation activities and environmental education. The Program is comprised of various organizations including Grupo PROA, CEDAPS, and BRF, as well as many other partners and residents who live in the Morro dos Prazeres community.

**Prevenção Realizada com Organização e Amor; Prevention Created with Organization and Love (Grupo PROA):** Grupo PROA is a public health program that was started in the Morro dos Prazeres community. Grupo PROA focuses on educating drug users and residents who have contracted sexually transmitted diseases. The focus of the organization changed in 2010, when there was a flood and landslide in the community that brought attention to the waste issues in Morro dos Prazeres.

**Brazil's Center for Health Promotion (CEDAPS):** CEDAPS is a partner in the Reciclação Program which offers technical expertise as well as funding to the Program. CEDAPS is working on the adaptation and reapplication of the CARE Program and the Reciclação Program to in order to implement the program in other communities around Brazil.

**Brazil Foods (BRF):** BRF is a partner of the Reciclação Program through its Institute. The BRF Institute is focused on health promotion in the cities where its factories are located. The BRF Institute has partnered with the Reciclação Program in Morro dos Prazeres because the needs of the community align with the goals of the Institute.

## Workshop Summary

### Day 1

June 20, 2016

Meeting at CEDAPS Office, Rio de Janeiro, Brazil

Day 1 of the Reciclação Workshop was designed to allow the participants to meet one another and to learn about the different partners represented at the workshop. Ms. Katia Edmundo welcomed the group and talked about the work the Center for Health Promotion (CEDAPS) does as a member of the partnership. Ms. Marcela Toguti introduced Brazil Foods (BRF) and the BRF Institute, as well as its history and the role it plays in the partnership. Ms. Mariana Gomes discussed Grupo PROA and the Reciclação Program in addition to the history of those two initiatives. Dr. Marva King and Mr. Danny Gogal discussed the United States Environmental Protection Agency (US EPA )CARE Program's history and legacy. Finally, Ms. Cris dos Prazeres provided more detail and insight into the Reciclação Program. The day concluded with a review of the goals of the workshop.

#### Welcome, Ms. Katia Edmundo

Ms. Katia Edmundo, executive director of CEDAPS, welcomed the workshop participants and thanked them for coming to the workshop and for providing the opportunity to come together to collaborate and share ideas. She expressed gratitude for the participation and support of the US EPA as well as for the participation of BRF, CEDAPS' sister partner in the Reciclação Program initiative.

#### Introduction of Brazil Foods (BRF), Ms. Marcela Toguti

Ms. Marcela Toguti is the director of the BRF Institute, which is a division of BRF, one of the largest food companies in the world. BRF produces and distributes 14% of the world's animal protein. It has 34 manufacturing sites in Brazil and 10 global sites. BRF has a social strategy that is integral to its corporate structure, which led to the development of the BRF Institute through the company's social initiative to promote the social wellbeing of the local communities in which BRF operates. The BRF Institute manages the corporate social responsibility efforts of the company and aims to promote the development of different communities in Brazil through identifying products and programs the Institute can partner with and support. When BRF identifies a need that is within its scope of the work, it partners with the community in question to support a specific program in the community. In Rio de Janeiro, BRF identified the Reciclação project and partnered with CEDAPS to promote and improve the Reciclação Program in Morro dos Prazeres.

#### History of BRF, Ms. Marcela Toguti

Ms. Toguti discussed the history of BRF and the establishment of the Institute.

BRF was formed by the merging of two food production companies in the southern part of Brazil and is now present in cities all around Brazil. When BRF builds a new factory or plant in a community, it promotes development by building housing and infrastructure. This community-based interest has allowed BRF to develop positive relationships with residents in these local communities. The BRF Institute was established in 2006 to coordinate all of BRF's community activities. As a result of the Institute's work, communities developed dependencies on BRF; this trend caused the Institute to change its focus. Instead of doing work *for* communities, the Institute began to work with communities with the aim of empowering them and building relationships. This new model allowed the communities to become active partners in the programs and invest their

own resources back into their community. In addition, BRF is currently working to bring in other companies as partners in order to involve them in idea exchanges with communities.

#### **CEDAPS History, Ms. Katia Edmundo**

Ms. Edmundo introduced CEDAPS and provided background and a history of the organization, for which she has worked since it was founded.

CEDAPS is a Brazilian Civil Society Organization that focuses on health promotion and works in 23 Brazilian states. Through its work, the organization partners with the Ministry of Health in Brazil as well as other international groups. In 1995, CEDAPS was part of the Healthy Community Network, which was sponsored by the World Health Organization. This Network was created to improve health, development, and transportation in communities throughout Brazil. CEDAPS has also partnered with Youth Build International. Through this program, CEDAPS was selected to represent Brazil through grassroots projects. CEDAPS works with a network of communities and people who have an interest in local activities. CEDAPS began its partnership with Reciclação to enhance youth engagement. Through this partnership, CEDAPS has been able to sponsor a number of initiatives, including renovating community squares, providing environmental development, promoting corporate responsibility in mining, and developing professional training to enhance health.

CEDAPS uses a number of participative methodologies in its work, including articulating policies with the public, networking with and enhancing isolated actions to make them stronger through partnerships, training to promote public health, working with youth to create a healthy culture, and strengthening and developing communities.

CEDAPS has been considering various options for developing a methodology for the Reciclação Program, with the intent of creating a model that could be replicated in other communities around Brazil. CEDAPS examined a number of existing programs in order to identify one that could be used to develop its own model. First, CEDAPS considered the Dreyfus Health Foundation but found that but the foundation's methodology did not have all the elements needed. CEDAPS then identified US EPA's CARE Program as one that matched its needs and could be replicated in Brazil. The CARE Program has a shared search for a solution, so all partners are involved in the collaborative process, as well as a mix of different techniques and methodologies. CEDAPS was interested in learning about the CARE methodology to guide the development of its financial and collaborative processes. It is through the CEDAPS partnership with US EPA that CEDAPS was able to host this workshop to learn about CARE and work to reapply it in Brazil.

#### **Reciclação History, Ms. Mariana Gomes**

Reciclação was first started by Grupo PROA (Prevenção Realizada com Organização e Amor; Prevention Created with Organization and Love) in 1998 in Morro dos Prazeres. Morro dos Prazeres is one of the largest favelas in the Santa Teresa neighborhood of Rio de Janeiro, with over 7,000 residents. Grupo PROA and the Reciclação Program were founded by Ms. Cris dos Prazeres, who continues to serve as the head of this organization. Ms. dos Prazeres started Grupo PROA to inform residents about and help them understand health concern because health information disseminated by the government is often strict and difficult for communities to understand. Grupo PROA was designed, in part, to help bring health education to people in a way they could easily understand. When Grupo PROA began, it was focused on helping and educating drug users and people with sexually transmitted diseases. The organization partnered with local health units to inform residents about public health and also to distribute contraceptives.

The major catalyst that changed the focus of the organization and led to the creation of Reciclação was the flood that occurred in Morro dos Prazeres in 2010, which left 34 people dead and

destroyed 355 homes. This event caused a shift in the focus of the community. Its residents became concerned about public health as it related to garbage in the community. Previously, they were focused on personal health, but the flood revealed how public health was an important issue that the community needed to work toward addressing. Along with the flooding, there was a landslide that was caused by the mountain of trash that had built up in one area of the community. This landslide was partially caused by clogged drains from garbage. Residents were not properly disposing waste because municipal trash collection is not possible in this area because it is so steep.

After the landslide, the youth of the community mapped the entire neighborhood – each house, step, and railing. Young residents have been an important and significant contributor to the community's effort to resolve trash issues. If they had not mapped the community, the extent of the garbage in the community would not have been realized.

In 2013, Reciclação started a project in the community to help solve the garbage disposal and recycling issues. The recycling effort has become an important part of the community, with six staff members who are paid and an additional 20 volunteers. By April 2016, over eight tons of trash have been collected in the Morro dos Prazeres community. Reciclação works to teach the population about recycling and how to properly dispose of trash items as well as how to reuse and recycle products. The program conducts this outreach by going to churches, schools, and community centers.

The Morro dos Prazeres community has suffered from increased levels of violence in the last six months. Often, violence causes social programs like Reciclação to halt for a time, but when this happens it is hard to reengage started again. However, Reciclação has not stopped working in the community and does not exclude anyone from being a part of the effort. Ms. dos Prazeres continuously talks with diverse members of the community to educate them about their role in creating a clean neighborhood.

The Reciclação project collects many types of recyclables including bottles, oil, plastic, and glass. These products are collected in eco bags, separated and properly recycled, reused, or repurposed. The profits from the reselling of products are invested back into the community. Reciclação placed eco bags placed throughout the community, which are often located close to a school or business that generates a large amount of recyclable materials. They are also spread out around the residential areas of the community. There are 44 eco bags, five fixed collection sites, and five oil collection sites. Each of the eco bags can hold up to 60 kilos of materials. Once filled, the eco bags are dragged by community members to the sorting center, which is located in a community gymnasium. Once at the sorting site, the recyclables are manually sorted by type of material. Currently, Reciclação is dealing with the issue of not having enough space to sort and store all of the recycled materials due to the fact that the gymnasium is still used for other community events.

The eco bags have become an important fixture in Morro dos Prazeres. When one bag was intentionally lit on fire, outrage spread throughout the community. This reaction was a stamp of approval for the program because it indicated that residents were invested in it and cared about it. The Reciclação staff has since changed the locations of the eco bags and has strategized the best location for each bag. Staff are often met with resistance when a bag is removed from a location, but this does not stop residents from continuing to recycle. The measure of success for Reciclação is when residents continue to recycle even when it is not convenient for them to do so.

Ms. dos Prazeres and others are continuously working in the community. Each day there is a campaign to involve residents in recycling, some of which are funded through the resale of recyclable products that are collected. For example, Ms. dos Prazeres has developed Community

Cafes where she brings coffee and snacks to areas of the neighborhood to educate the residents about the recycling project and how to use the collection bags. She not only discusses recycling, but also listens to community members discuss their needs. She also hosts employment seminars to assist residents with job training. These types of initiatives are important because residents are educated about recycling and are gaining skills at the same time.

Task forces were established through Reciclação after the flood in 2010 to remove the accumulated waste. These task forces were created by community members who wanted to clean up their community. They are less active now because they have been successful in removing and properly disposing of most of the accumulated waste. Where there was once a mountain of garbage, there is now a community square for people to gather. In addition to the task forces, there are many programs that work to educate and involve kids in the community. For example, there is a youth task force to collect materials. Reciclação also works to teach youth how to sort the recyclables. Youth are very important in the process because they can transform the culture of the neighborhood and they can teach their parents and grandparents the importance of properly disposing of materials. Another program that has been developed is Ecological Bingo during which residents can bring in recyclables and are provided with a Bingo card to play; this is a fun and easy way to encourage community members of all ages to recycle.

**Community Action for a Renewed Environment (CARE) Program History and Legacy, Mr. Danny Gogal and Dr. Marva King, US EPA**

US EPA was represented in Brazil by Dr. Marva King, Mr. Danny Gogal, and Ms. Cam Hill-Macon. US EPA expressed its excitement to be in Brazil to learn about the different groups that are convening for this workshop and the ways these groups are involved in their communities. Dr. King and Mr. Gogal noted that they see similarities between the work being done by CEDAPS and Reciclação and the work that is done through US EPA's CARE program.

In 1992, US EPA created the Office of Environmental Equity. The office was established because there was a need for the Federal Government to address environmental and health issues being raised by local communities. Vulnerable communities requested that US EPA create pathways to improve public health. The name of the office was later changed to the Office of Environmental Justice to better reflect its vision and mission. The Office of Environmental Justice has a number of partnerships with other federal agencies as well as with states, local governments, communities, and businesses.

The CARE Program developed out of the Environmental Justice Collaborative Learning Policy. As part of the CARE Program, a grant program was initiated that issued \$5,000 to communities or tribes through a grassroots organization or faith-based organization. One of the communities awarded a CARE grant was a neighborhood in Los Angeles, California, in which a group of women wanted to eliminate the trash that was piling up in their community. Through the CARE program, they were able to access partners and technical assistance from US EPA. The community was very successful in its cleanup initiatives because of the support received from CARE. The type of community initiatives supported by the CARE Program are sparked by a desire to change the environment and create leaders in the community. There are members of every community who are excited and want to work toward improving the lives of their fellow residents. The most successful communities in the CARE Program are those with strong business partners, as these relationships allow work to continue in the community even after a CARE grant has expired.

The Reciclação Program Workshop represents the first time the CARE model has been accessed outside of the United States. US EPA is confident that through the efforts of CEDAPS, BRF, and Reciclação, this model will be successful in Brazil.

### Early History and Successes of Reciclação, Ms. Cris dos Prazeres

Ms. dos Prazeres provided additional information regarding the history of Reciclação and how it became a successful program in Morro dos Prazeres. She explained that Reciclação is currently in an important moment. The program was founded with the goal of providing community members with a better, cleaner neighborhood. Many were initially skeptical that residents of a favela in Rio de Janeiro were going to care about the environment. However, Reciclação found that all people have the desire and dream to live in a place with peace and health. People have a desire to connect with where they live and a desire to learn. The people of Morro dos Prazeres were attracted to the Reciclação Program because they were able to learn and become more knowledgeable about something that affects them.

Reciclação started with just four eco bags in which people could place any type of refuse. This model had its risks because people did not have to sort their waste, but the first step was to show people that there was a place for their waste to be disposed. Quickly, the program grew and it now maintains 44 eco bags. Reciclação is changing the world, and the residents who participate in the program know that they are creating a healthier neighborhood and they are not sending as much waste to the landfill. This program raises awareness about the value of human life and creates awareness and learning by changing people's attitudes.

Reciclação eventually partnered with BRF consulted with Morro dos Prazeres community members to understand their needs. BRF was particularly well suited for this partnership because the aim of Reciclação is to bring awareness to the community, and food is the driver of this awareness. In addition, there was a social restlessness in the community that caused residents to spring into action. The flood in 2010 made the community look at the way it was dumping waste and the severe consequences it had and spurred the community to come together to deliberate solutions for this problem. When residents began to understand their contribution and role in this effort, they felt empowered to come up with a solution. The youth were an important driver because they were very curious and asked questions, as well as demanded answers.

Reciclação was officially launched at two events in the community. The first was a literature event to bring books and art to the community. Reciclação was formally announced at this event because it was an event for the whole community. Then, a scavenger hunt event was held to introduce residents to Reciclação, which was attended by more than 300 residents. The Reciclação Program works because all the activities that Reciclação hosts are community-oriented.

The residents of Morro dos Prazeres recycle because they want to do it for themselves. There is no individual incentive for recycling; residents simply want a clean place to live and understand how they are making a difference in their community, city, country, and world. No money or food is provided to residents in exchange for recycling because once incentives are introduced, residents expect a reward each time they recycle. Reciclação aims to help people learn to collect trash everywhere and to take pride in themselves and their community for being environmentally responsible.

The success of a program like Reciclação is dependent upon strong leaders in the community to help drive the program. BRF is an important partner to the program because it has the capabilities needed to coordinate and manage logistics for communities. Reciclação places a strong emphasis on listening to the community and having the community identify what it needs and wants. BRF follows the same philosophy and is the vehicle for helping to accomplish these actions.

Ms. dos Prazeres feels that a responsibility exists to share knowledge and to continue to promote these programs that do community work. Reciclação can be used in many communities because it

is a system that is developed in the community and by the community. Residents share the knowledge of their local environment and how it impacts the larger, global community.

#### Goals and Agenda, Ms. Katia Edmundo

Ms. Edmundo discussed the goals of the workshop as well as the agenda for the remaining days.

- The central goal of the workshop is to have each participant or small group develop an action plan that models Reciclação for application in their communities. The goal is not to *reproduce* Reciclação in different communities, but instead to *reapply* it.
- Another goal is to work to systemize the Reciclação Program and develop a manual that someone can use as a guideline to put this program into practice.
- The CARE Program is the source of inspiration for the workshop, and its 10-step program will be discussed in the workshop in order to develop ways it can be reapplied across Brazil.
- The workshop agenda is designed around the CARE Roadmap. Each step of the Roadmap is included to help participants think about ways it can be changed or amended to be reproduced in Brazil.
- Ms. Edmundo emphasized that this is a pilot project and there are no right or wrong ideas or answers. The goal is to share ideas and knowledge and develop next steps so Reciclação can be introduced in other areas.



## Day 2

Tuesday, June 21, 2016

MAR Museum, Rio de Janeiro

Day 2 of the workshop started with introductions from the different partners present at the workshop. Ms. Katia Edmundo reviewed the workshop goals and introduced everyone to the “A-Ha Mural,” where participants could place ideas or questions as they thought of them throughout the workshop. Dr. Marva King and Mr. Danny Gogal presented on the CARE Program Roadmap, providing background and examples of how it is used. A number of presentations followed from partners who discussed how their work aligns with the first three steps of the CARE Roadmap.

### Welcoming Remarks, Ms. Katia Edmundo, CEDAPS

Ms. Edmundo welcomed everyone and thanked them for participating in Day 2 of the workshop. She also thanked MAR Museum for hosting the workshop. Ms. Edmundo noted that the first time US EPA met with CEDAPS to discuss ReciclAco three years ago, the meeting was in the MAR Museum as well. She noted her enthusiasm to return to MAR Museum with the partnership to exchange more ideas and grow as a program.

### Welcoming Remarks, Ms. Cam Hill-Macon, US EPA

Ms. Hill-Macon expressed her excitement to be in Rio de Janeiro for the workshop to support CEDAPS and ReciclAção and to introduce them to the CARE Program. It was through US EPA's efforts to help people and communities who wanted sustainability, but did not have the means to obtain sustainability services, that programs like CARE arose. It was through this same idea that US EPA was able to find CEDAPS and ReciclAção and build a partnership with Brazil to help support the ReciclAção program.

### Welcoming Remarks, Ms. Marcela Toguti, BRF

Ms. Marcela Toguti discussed how BRF is represented at the workshop both as a company, but also as an Institute that is focused on social responsibility. The BRF Institute builds community partnerships in the localities where BRF operates. Several different BRF locations were represented at the workshop, all which have a strong connection to their respective communities. She stressed that the ReciclAção workshop will help the BRF Institute grow strong partnerships as well as start new partnerships.

### Review of Workshop Goals, Ms. Katia Edmundo

Ms. Edmundo discussed the goals of the workshop and the collective roles to be played by participants. She emphasized that the workshop was designed to be a collaborative process and the models and examples presented need to be useful and applicable to the sites of the workshop attendees. She also stressed that all participants need to contribute and participate in order to ensure that the models being presented can be successfully reapplied in Brazil. Ms. Edmundo stated that many ideas have already been shared through partnerships, but that the workshop will provide a new opportunity for a collective learning experience. Finally, Ms. Edmundo reminded participants that they are all coauthors of the workshop process and that they are all important and integral in moving the process forward.

### “A-Ha Mural”

Ms. Edmundo introduced the “A-Ha Mural” to the group which is an exercise aimed at helping the group share ideas with one another in a visual way. Ms. Edmundo explained that when someone has an “a-ha” moment, they can write it down and place it on the mural so it can be shared with the

group. Ms. Edmundo then asked each participant to write down an initial question about the workshop.

The questions developed are as follows:

- What is Reciclação?
- What are the actions, motives, and perspectives of these groups?
- What led BRF to committing to engage in Prazeres?
- What is Brazil's public policy on a large scale?
- How can we dialog on a large scale?
- How can we gain self-sufficiency in the long-term?
- How do we get communities, partners, and the government engaged?
- How do we implant Reciclação in our city?
- What will Reciclação look like in 2020?
- How did you search for and develop partners for Reciclação?
- What were challenges for Reciclação?
- What is the concrete result of this meeting?
- What is the role of government in Reciclação?
- What are some other communities and how can they connect with Reciclação?
- How do partners get involved?
- How do you maintain community engagement?

Ms. Edmundo noted that one of the goals of the workshop is to answer these questions over the course of the workshop.

#### CARE Presentation, Dr. Marva King and Mr. Danny Gogal, US EPA

The Community Action for a Renewed Environment (CARE) Program was sponsored by US EPA for 10 years. Dr. King helped to develop the program and is the last person at the agency who was part of the program. The CARE Program focused on grants and education programs for communities around the United States.

The CARE Program follows a 4-step process:

1. *Build a Partnership*—join together and find other people and groups who are interested in the same work.
2. *Identify Problems and Solutions*—the community knows its concerns; help them map and envision the concerns in a concrete way.
3. *Take Action*—implement solutions and reduce risks.
4. *Sustainability*—become self-sustaining without funding, but through partnerships.

CARE was developed in response to community requests for help and as a means to address concerns that were beyond the reach of national regulation. CARE integrated agency programs to improve support for communities, mobilized new resources, used local knowledge to achieve results, and developed community consensus on sources of risk and risk reduction options. An integral part of CARE was partnering communities with businesses in order to increase sustainability success.

The CARE model is about more than money. US EPA worked directly with communities to provide technical support and information, scientific expertise and assessment, community planning to help identify and reduce risks, US EPA voluntary programs, networking opportunities, and shared learning.

There are two available collaborative problem solving models to help implement CARE. These models were developed by communities and other stakeholders who have used CARE.

- CARE Roadmap: [ [HYPERLINK "https://www.epa.gov/sites/production/files/2015-04/documents/care-roadmap.pdf"](https://www.epa.gov/sites/production/files/2015-04/documents/care-roadmap.pdf) ]
- EJ CPS (Environmental Justice Collaborative Problem Solving Model): [ [HYPERLINK "https://www.epa.gov/sites/production/files/2015-03/documents/cps-manual-12-27-06.pdf"](https://www.epa.gov/sites/production/files/2015-03/documents/cps-manual-12-27-06.pdf) ]

The CARE Roadmap has 10 steps. These steps do not have to occur in the order indicated below. This model is customizable and changeable to suit the needs of each community. It is this 10-step program that is the basis for the workshop and these steps will be discussed and reviewed for reapplication as part of the Reciclação program:

1. Build a partnership
2. Identify community concerns
3. Identify community vulnerabilities
4. Identify community assets
5. Identify concerns for immediate action
6. Collect and organize information
7. Rank risks and impacts
8. Identify potential solutions
9. Set priorities for action and begin work
10. Evaluate results and become self-sustaining

The Collaborative Problem-Solving Model consists of seven elements and was developed by US EPA's Office of Environmental Justice in collaboration with the Federal Interagency Working Group on Environmental Justice. The communities that used the collaborative problem-solving model were most successful when they partnered with local governments. Local governments are important partners because they know the needs of their communities. Business and multi-stakeholder partnerships are also very important because these partnerships offer businesses the opportunity to be involved in their communities. Businesses can become long-term partners for local initiatives. In the CARE model, one of the requirements is to have a business partner.

The seven elements of the Collaborative Problem Solving Model are:

1. Issue identification, community vision, and strategic goal setting;
2. Community capacity building;
3. Consensus building and dispute resolution;
4. Multi-stakeholder partnerships and resource mobilization;
5. Supportive and facilitative role of government;
6. Management and implementation; and
7. Evaluation, lessons learned, and replication of best practices.

Annual CARE Workshop Training offered communities an opportunity to learn, ask questions, and access resources. The annual workshop brought all the communities together to learn from each other. There was never a session in any of the workshops that did not have a community voice. Some of the topics discussed in the annual training include:

- Training on all aspects of the CARE Model and CARE Roadmap
- Partnership building and data collection tools
- Targeted technical training
- Mentoring among community partnerships
- Discussed process design to achieve consensus and facilitate action

- Developed sustainability checklists

Part of the CARE Program was a competitive grant program that issues 100 grants. In this grant program, US EPA was a partner with the communities that receive the grants; US EPA did not oversee the work that is done in the community. Through the grants program, US EPA was able to build a technical team in regions across the nation. These technical teams consisted of local technical experts. CARE had a two-part grant system, consisting of a \$100,000 and a \$300,000 grant. Only groups that had already received the \$100,000 grant were eligible to apply for the \$300,000 grant.

- The \$100,000 grant was established for communities to identify issues, gain partners, and begin working toward solutions.
- The \$300,000 grant was much harder to apply for and be awarded. This grant focused on finding solutions, not identifying issues. The groups that were awarded these grants had very strong community leaders and committed business partners.

The CARE Program required a partnership with the private sector. There is a strong need for partnerships with the private sector; community programs need to build relationships with the businesses and see them as a part of the community so that ideas align. When businesses are included in community discussions they can help identify issues and also be part of the solution. When one business joins the effort, others will likely follow. It is also important to keep inviting business to the table; there is always space for them to contribute. In addition, collaborating with many partners helps to keep a steady revenue stream. When there are multiple contributors, there are multiple funding sources as well as technical sources. US EPA brought a regulatory role to many of these communities. Foundations are also able to contribute to projects when the mission of the community aligns with their own.

#### **Presentations about Territory Mapping and Mobilization of a Partner Network**

The workshop participants heard from partners in the Reciclação Program about their role in the partnership. They discussed the ways they have mapped communities, and how they have leveraged the partnership to achieve results.

#### *Presentation by Mr. Charles Siqueira, Polen Institute*

Mr. Siqueira began his work in Morro dos Prazeres 15 years ago when he started the Polen Institute with a very small dance program for children. He was able to expand it to include computer literacy classes because he has experience working in the industry. Mr. Siqueira expressed that necessity is what motivates the work that is being done in Morro dos Prazeres. When necessities are identified, the people who are interested in learning and helping will be attracted to the work that is being done. One of the goals of the Polen Institute is to make people aware of the community they live in and their role in the community. People can be selfish, but when they are shown that they are part of a community, they learn how to work together as a group. As the work of the Institute grew in the community, Mr. Siqueira was able to open a library and to help identify the diverse skills that people have. As the community changed, different necessities came to the forefront of the work that the Institute was doing. Partners have been an important part of the Institute because they have helped fund the different programs. As the projects of the Institute change, they have found different partners that are passionate about the work they are doing and can help sponsor these programs. The Polen Institute is currently looking for new partners after having lost funding when the state of Rio de Janeiro went bankrupt.

#### *Presentation by Ms. Marcela Toguti, BRF*

Ms. Toguti discussed how BRF became involved in social responsibility and the type of it is involved in with different communities. BRF understood that as a business it had a social responsibility, so in 2010, it established the Institute. BRF started asking questions about how to deal with the waste

produced from its operations, what innovations it could implement, and how to make interested parties accountable for their waste. BRF considered how to promote its food products in addition to economic development in the areas where BRF operates. In order to do so, BRF looked internally at its products and found that Rio de Janeiro was the largest generator of BRF waste products. The BRF Institute then reached out to Morro dos Prazeres and CEDAPS and found that they had aligning goals: to promote people and health. At the same time, BRF understood the different roles each group plays in the partnership, which informs how they work together. BRF is now represented in each city where it is located. In each of these cities, the Institute is partnered with the local community to provide resources for sustainability. None of the initiatives that BRF supports are BRF-led initiatives. Instead, they are a collective of the common goals developed by the community.

*Presentation by Ms. Cris dos Prazeres, Reciclação*

Ms. dos Prazeres discussed the different partnerships that have been formed through the Reciclação Program. In order to make the program a success, the members of the community had to challenge their own abilities and learn how to connect with themselves as well as their community.

CEDAPS wanted to build a new technology with new tools, called Rio Resiliente (Resilient Rio). The partnership between Reciclação, CEDAPS, and Resilient Rio saw a group of people who wanted to work as a collective team, when previously they had not had a team-oriented mindset. The goal of building resilience in Rio came about because community members want dignity and want to have pride in themselves, even when they are considered invisible.

*Presentation by Mr. Ricardo Alves, Office of the State Secretary of the Environment*

Mr. Alves discussed how the State of Rio de Janeiro is working to implement environmental solidarity by developing cooperatives and generating revenue for the city. The Office of the State Secretary of the Environment has promoted the formation of 55 cooperatives and seven networks to help manage waste in the city. This partnership of Reciclação, BRF, and CEDAPS can count on the support of the state government of Rio and the Secretary of the Environment.

*Brazil Zero Waste Institute*

The Brazil Zero Waste Institute provides waste collection and separation services. The Institute feels that Reciclação has been the best program in the state because of the volunteerism of the community. Community members also do not see the garbage as waste, but instead as raw materials.

*Presentation by Mr. Pedro Miranda, Rio Resiliente*

Mr. Miranda talked about the origins of Rio Resiliente. The 2010 landslide in Morro dos Prazeres was a catalyst for this project. There was no way to predict or prepare for this large-scale disaster. Rio Resiliente was able to collect technical information about the communities and map them. There is now a lot of technical information that can be joined with information from other groups to work together.

*Presentation by Ms. Cris dos Prazeres, Reciclação*

Ms. dos Prazeres discussed the process by which Reciclação built its partner network. It took a long time for Reciclação to connect with the many different groups that have been working in Morro dos Prazeres. Before the flood in 2010, Reciclação was already working with CEDAPS and The United Nations Children's Emergency Fund (UNICEF) to find solutions for other problems in the community. The partnership was already discussing a number of issues in the community, but the flood spurred the mapping process and also made residents look outside of their community. The youth of the community mapped the whole neighborhood by using a large kite, which is a common object and considered a kind of symbol of the community. The young residents attached a camera

to the kite and were able to obtain aerial shots of the neighborhood which highlighted how much garbage had built up in the community. This aerial tool was very important to the mapping process because objects like handrails for steps and bridges are permanent, but trash was always growing and being generated. Once the mapping was complete, the youth presented their completed map product to City Hall. It was very important that the young people who conducted the work on this project had the opportunity to show their work to their local leaders. As a result of this work, residents started asking questions and became interested in finding ways to deal with not only the health issues in the community but also the environmental issues all this garbage was creating.

#### Group Activity: How to Use Territory Mapping and Mobilization of a Partner Network

After hearing the speakers, the participants were divided into two groups. The two groups were asked to think about the first three steps in the CARE Model, and were given prompts to help form the discussion.

##### Step 1: Identify opportunities and establish opportunities

- Motivation to start a community action.
- Different ways to identify and connect with different partners.

##### Step 2: Mapping the territory: vulnerabilities and assets

- Map the waste dump sites.
- Check how waste is disposed.
- Understand the use and disposal of materials in the territory.
- Understand the relation between solid waste and geography of the territory.
- Identify resources to be streamlined.

##### Step 3: Constitute a partners network

- Who are the partners who must be attracted by this initiative?
- What are the reasons to establish a network of partners?
- How to keep the network of partners active.
- Operating ways of working group.

After the groups had sufficient time to discuss all three steps, they presented their key findings for each step, which was followed by a group discussion.

#### Step 1 Responses

##### Group 1:

- Motivations come out of the needs and wishes of a community.
- There is a mobilization and engagement process that needs to be followed for success.
- Changing the culture and the way people think is important.
- Need to be stubborn, committed, and empathetic when trying to elicit results.
- Need to be capable of overcoming own frustrations.

##### Group 2:

- Need to involve everyone in the community. The community needs to take part in the transformation.
- Think about what we have already learned.
- Think about the dynamic for a specific site.
- Understand when and how there is a paradigm shift in a location?

#### Step 2 Responses

##### Group 1:

- Understand the issues around waste disposal.

- Must be aware that this is true garbage.
- Working with the general dynamics of waste in the community.
- Focus on the achievements of what the community, government, and private sector can do to work together.
- Discuss the health and environmental changes and how these groups working together can impact those health and environmental changes.

#### Group 2:

- Teach people how they relate to the waste that is around them. They are contributing to the waste in their community.
- Change starts with the youth of the community. Once the youth are informed, they can take this information home and transform their home and how their parents think about waste.
- Everyone is responsible and accountable for the waste they create.

#### Step 3 Responses

The Step 3 responses were given in a discussion format, not presented out by the groups separately.

#### Responses:

- It is important to think of the residents as partners. Residents have different ideas about how garbage should be collected. When working in communities, the information presented needs to be in a context residents understand so they know their role and contribution in reducing trash. They are a partner in this process by realizing they are responsible for disposing the waste they create.
- There will be people in each community who stand out as leaders, but everyone needs to see the role that they play. Everyone in the community is a protagonist in the process and there are a lot of anonymous leaders in the community.
  - Each member of the community needs to feel important and shown that they are leaders in their communities, and making a valuable contribution. Try to understand the contributions of each person and how their contributions fit into the community.
  - There should not be one leader who is more important than any other leader in the community.
- Partners need to have a common wish to mobilize. They need to believe in the context of what they are doing together, see their role in it, and be committed from planning through execution. Every partner must be committed from beginning to end in order to have a successful partnership and project.
- Transparency is important to maintain the relationship. The partners have to be flexible and know that one person or group is not more important than another in the process. Respect, trust, and transparency between all the partners will make for a successful partnership.
- Many actions of the state are also important. In Rio de Janeiro, the favela needs to be incorporated into the state and be a part of it. They have been excluded from the city, but they need to be part of it.
- Need to understand the involvement of the youth in the process. Youth are extremely important in the change and the government is starting to recognize this.
- When seeking to bring in new partners, understand that even if they may not be able to contribute something immediately, they will be able to contribute over time. People have good intentions to help, they just need the opportunity to be involved.

## Day 3

Wednesday, June 22

MAR Museum, Rio de Janeiro

Day 3 of the workshop began with Ms. Katia Edmundo introducing the 5 Rs of Reciclação and discussion of the agenda and activities for the final two days of the workshop. The activities on Day 3 incorporated more small group activities and group discussion. The day started with a presentation by Davi of the Municipal Health Secretariat of Rio de Janeiro about the importance of health education in communities. The participants were divided into groups and discussed Steps 4, 5, and 6 of the CARE program. For the group activity, the participants were divided according to the cities in which BRF operates: São Paulo, Santa Catarina, and Toledo. The other workshop participants from Rio de Janeiro joined the three groups to offer their insight, expertise, and experience working with the Reciclação Program. The discussion was followed by a presentation by Ms. Mariana Gomes and Ms. Cris dos Prazeres discussing how they have already applied these steps in Morro dos Prazeres. Dr. Marva King of US EPA later presented on Step 10 of the CARE Program. The day ended with a discussion about how to lead with opportunities.

### Agenda for Day 3:

- Introduction of the 5 Rs of Reciclação
- Presentation by Davi from the Municipal Health Secretariat about how its partnership with Reciclação on health education
- Group Activity discussing Steps 4, 5, and 6 of the CARE Program
- Presentation by Ms. Gomes and Ms. dos Prazeres on the ways that Reciclação has already implemented the Roadmap steps
- Presentation by Dr. King on Step 10 of the CARE Program
- Leading with Opportunities Discussion

### The 5 Rs of Reciclação

The 5 Rs of Reciclação were developed as the five guiding principles for the Reciclação Program. These principles were developed as a result of the robust conversations over the first two days of the workshop. They are intended to help drive the workshop and the development and reapplication of the 10-step CARE Program. The principles will also be used beyond the workshop in conjunction with the 10-step process to guide reapplication of the Reciclação Program in other cities in Brazil.

### The 5 Rs

#### English:

1. **RECOGNIZE**: the problem and that there are solutions. Recognize that waste is a problem and that there are solutions.
2. **REDE** (Network): create a network of partnerships that are both internal to the community as well as external. A network needs to be broad and inter-sectoral. Networking needs to be open, continuous, and on-going.
3. **RE-EDUCATION**: of the public on its role in waste and how it is part of the solution. Use cultural and health platforms to educate the public about the social and environmental changes that are needed.
4. **RECOVERY**: use a collective return so that the entire community benefits from recycling. The community has a collective interest and the community is rewarded collectively, not



individually. Individual income generation is not a solution for this work; the solutions need to benefit the entire community.

5. **RENEWABLE RESOURCES:** are returned to the community. Use a circular model so that any resources are reinvested in the community so that it can further advance its waste and recycling needs.

Portuguese:

1. **RECONHECIMENTO:** do problema e de um caminho para buscar soluções -Parte do reconhecimento do lixo como problema e da coleta de resíduos sólidos uma solução
2. **REDE:** de parcerias como ideia chave da mobilização (aberta e continua). Está pautado por uma ação em rede interna e externa a comunidade (intersetorial)
3. **REEDUCAÇÃO:** a plataforma socioambiental pautada pela cultura local e saúde . Defende que a educação e as ações coletivas / práticas sejam um bom caminho para a mudança (cultura promotora da saúde e desenvolvimento )
4. **RETORNO:** coletivo - o incentivo e retorno ao envolvimento comunitario é o bem /valor coletivo/compartilhado e não a "geração de renda " (não como um fim)
5. **RECURSO:** renovável (para o local e para o planeta") para fazer o ciclo girar - o recurso financeiro gerado (processo e meio) alimenta a Reciclagem + ação socioambiental e vice-versa

Presentation by Mr. Davi, Municipal Health Secretariat

Mr. Davi and the Health Department have been working to eradicate dengue fever in the Santa Teresa neighborhood of Rio de Janeiro, where Morro dos Prazeres is located. Mr. Davi's presentation focused on the ways that the Municipal Health Secretariat partner with Reciclação and other programs to create a collective platform to improve community health. Mr. Davi's experience and presentation was used as an example of the ways that collective platforms can be successful, which was the topic for the subsequent group activity.

- The Health Department has been working with Reciclação as well as partnering with schools and other community organizations to educate the community about dengue fever and how to minimize its spread.
- Santa Teresa has over 40 thousand residents so it is important to partner with local community groups like Reciclação. These groups are integral to educating residents because they know the community well and can reach more residents than the Health Department can alone.
- Partnering with Reciclação is very important because the efforts of recycling align with the efforts of the Health Department. When waste is removed, there are fewer places for mosquitos to lay their eggs, which lowers the possibility of residents contracting dengue.
- There are a few factors that contribute to the success of this program, including engagement with and ownership felt by the people in the community. People are working together, taking pride in where they live, and thinking about their health and future. There is involvement from the youth as well, which is very important because they are creating a culture shift.

Group Activity: Socioenvironmental Education Platform, Collective Platforms, and Sustainability

The participants divided into their respective location-based groups of Sao Paulo, Santa Catarina, and Toledo to discuss Steps 4, 5, and 6 of the CARE Program. The participants were asked to consider the steps, as presented below, what they has just heard from Mr. Davi, and their own experiences to develop an action plan for Steps 4, 5, and 6. The groups did not report out on these steps individually. Instead, the groups presented their overall ideas for implementing the 10

roadmap steps in their communities. Ms. Edmundo reviewed Steps 4, 5, and 6 and presented some ideas and questions related to each step.

#### Review of Steps:

##### Step 4: Create and institute an environmental education platform (personal and environmental care)

- Inspire others and provide them ways to clean their territory
- Connect one person to another in different areas and with different perspectives
- Appropriateness of the language campaigns

##### Step 5: Joint efforts and collective actions

- Focus on the result of the action and on the collective action or connection
- Promote the improvement of the environment
- Be an example and encourage participation

##### Step 6: Involve family as protagonist of the action

- Delivering the recycling material the resident becomes the protagonist of the action
- Change of perspective: From garbage to solid waste

Ideas and Questions to discuss related to each step:

#### English:

##### Create and institute an environmental education platform (Step 4)

- What are the steps and strategies for creating actions toward environmental education?
- What guidelines and concepts need to be considered and what are the tools?

##### Joint efforts and collective actions (Step 5)

- What do we know about waste disposal in the territory?
- What are the problems related to it?
- How can these problems be solved or minimized?

##### Involve the family as the protagonist in the action (Step 6)

- How do you involve the family in this action?

#### Portuguese:

##### Criar e instituir plataforma de educação socioambiental (Passo 4)

- Quais as estratégias e espaços para realizar as ações de educação socioambiental?
- Quais diretrizes e conteúdos a serem trabalhados (consumo/hábitos/crenças)? Quais são os instrumentos de comunicação?

##### Mutirões e ações coletivas (Passo 5)

- Quanto você conhece sobre o descarte do lixo em seu território?
- Quais são os problemas relacionados a ele?
- Como estes problemas podem ser resolvidos ou minimizados?

##### Envolver a família como protagonista da ação (Passo 6)

- Quem é o protagonista da sua iniciativa? Como ele é envolvido

#### Discussion of CARE Steps 4, 5, and 6 by Ms. Mariana Gomes and Ms. Cris dos Prazeres, Reciclação

Ms. Gomes and Ms. dos Prazeres discussed the ways in which they have successfully used the above steps in the Reciclação Program. They discussed some of the education initiatives they have developed for the program as well as some of the activities they have initiated to involve more

members of the community. These initiatives do not always exclusively address recycling, but instead they discuss other issues that are important to the residents while at the same time promoting waste education. Reciclação aims to constantly educate the community about waste until it becomes part of the common knowledge of the community.

- Reciclação continually thanks the residents because without their help they would not be able to meet their quota for collected recyclables each month.
- Reciclação puts up posters for different health and recycling campaigns they develop. Some of these include the cycle of garbage, how to dispose of garbage properly, and how garbage affects the community.
- Reciclação also created posters that show the value of families and how important they are to the community.
- In their posters, Reciclação uses symbols that people are familiar with, like the Facebook “like” and “dislike” button to show what can and cannot be recycled.
- Reciclação has had many campaigns for children. These campaigns do not focus on giving the children presents, but instead on being present with them. They have a waste campaign from October (Children’s Month in Brazil) to Christmas, and then through Carnival. During these times, gifts are often given and there is a lot of waste generated. Reciclação uses these times as an opportunity to educate residents about waste and how to properly dispose of it in addition to teaching people how to reuse items.
- Reciclação does not use technical terms when discussing waste, but instead uses terms that the community can easily understand. Reciclação educates people by talking about things the residents can see in their community. Instead of talking about the sewage draining into the lagoon that is miles away, they talk to residents about the drain that is outside their front door and how they can become clogged. If the residents can see it, they will understand the issue better.
- Reciclação provides breakfasts at bus stops in the neighborhood. The residents are encouraged to engage and give feedback at these breakfasts. Reciclação also hands out educational flyers at these events.
- Churches and religious organizations are important for engaging residents in the programs. Reciclação speaks to the religious leaders about the program so they can engage their congregation. Reciclação has also promoted its initiatives by finding Bible verses and religious texts that support the same ideas.
- Reciclação has been very successful in creating Task Forces that specialize in different projects. Task Forces get residents involved and can contribute to the community by helping residents gain a new perspective about where they live. One of the largest and most active Task Forces focused on the cleanup of the trash and debris that caused the landslide.

#### Presentation of CARE Program Step 10, Dr. Marva King

Dr. King of US EPA discussed Step 10 of the CARE Program, which focuses on fundraising and sustainability.

Sustainability of a program can come from a number of different sources such increasing partnerships, developing and promoting leadership training, and capacity building. Sustainability is not always about funding, and funding should not be the focus of sustainability.

There are many types of organizations that can provide resources that range from funding, to technical assistance, to providing materials and supplies.

- Foundations have funds to support community projects through grants and awards.

- NGOs will analyze environmental hazards and can provide support through technical assistance and funding.
- Large corporations, such as BRF, can be program partners and provide a variety of resources, including donating materials.
- Philanthropic organizations have large networks that can provide funding or technical assistance.
- Faith-based organizations can champion initiatives and may be able to provide funding.
- Colleges and universities can provide technical expertise and research opportunities.

#### Leading with Opportunities Discussion, Ms. Katia Edmundo

Ms. Edmundo led a discussion about looking for different opportunities. New partnerships can always be formed and there are always new opportunities presenting themselves. She shared some examples of new partnerships that can be formed when taking advantage of opportunities.

The Olympics coming to Rio de Janeiro provides an opportunity to focus on a complete Brazil, and not just on separate municipalities. There have been many advancements as a result of the development related to the Olympics, which need to be continued. The Pacification Police started this opportunity because there is peace in the favelas, so these neighborhoods have the opportunity to start new programs and projects.

Partnerships with other organizations have provided new opportunities as well. For example, an oil company sponsored a new bridge in Santa Teresa because it was needed for the company's business. This bridge was something the community had wanted for a long time as well, but did not have the resources to build. By working together and forming partnerships, it was possible to build infrastructure that benefitted the company and the community.



## Day 4

Thursday, June 23

MAR Museum, Rio de Janeiro

Day 4 of the workshop began with a presentation by Mr. Moabe and Mr. Galdino of COMLURB, the Municipal Cleaning Company. Mr. Moabe and Mr. Galdino discussed sustainable logistics and how they determine the viability of recycling a product. The groups then participated in an activity to review all the Roadmap steps discussed thus far (Steps 1-6, 10) and develop a plan of action on how to implement the Roadmap steps. The groups were given an exercise worksheet to start developing a plan of action for their communities. The three participating cities, São Paulo, Santa Catalina, and Toledo, then reported out on each of the steps in the worksheets. Mr. Lucio Gil from the US Consulate in Rio de Janeiro came to the meeting to promote the Consulate's support of the work that Reciclação is conducting. The workshop concluded with a discussion of the goals and outcomes of the workshop.

### Sustainable Logistics, Mr. Moabe and Mr. Galdino, COMLURB

The Municipal Cleaning Company (COMLURB) is part of the municipal government of Rio de Janeiro that deals with urban cleaning. The presentation focused on the different ways sustainability is possible in recycling.

- COMLURB has developed leaflets that talk about products that are difficult to recycle. These products can often have alternative uses or ways to be recycled.
- COMLURB has developed a list of factors to determine if and how a product can be recycled in the most cost-effective way:
  - A product is comprised of different materials that cause contamination;
  - The investment in the recycling of the material to keep the chain going;
  - Looking at the market to see where to place the material because sometimes the cost is too high;
  - Trying to get the public sector to take on the costs;
  - Press the recyclables in a compactor because the smaller volume is less cost;
  - Compacting also helps with transportation, which lowers cost;
  - If plastics can be shredded into flakes, that is lowest cost; and
  - Materials have to be disposed of correctly by law.

### Group Activity: Implementation of the Roadmap

The groups then reconvened to discuss the Steps of the Roadmap and thought about how they could be applied in each community. The groups were given worksheets to write action plans as they relate to the first 6 Steps of the Roadmap. The groups considered all 10 Steps of the roadmap and the 5 R's, but only had to develop action plans for the first 6 Steps. When considering the steps, the participants were reminded that they do not have to be completed in order, but that they do link to one another. When working through the steps, groups were to understand what has been done, what needs to be done, and in some cases, which steps need to be done again, continuously, or simultaneously. The exercise sheet is included as Appendix B of this document. The groups then reported out on how their locations have already been implementing these steps or ways they can work to implement them.

The six topic areas defined in the exercise sheet that the groups reported out on were:

1. Identify opportunities and partnerships.
2. Map the territory: vulnerabilities and assets
3. Establish a network of partners
4. Create and institute an environmental education platform
5. Joint efforts and collective actions
6. Involve the family as the protagonist in the action

#### São Paulo

- Identify Partnerships: São Paulo already has an established network and active residents association to build a strong partnership. They are already working with the public sector to clean up neighborhoods and are looking to strengthen their partnership in order to identify leaders in the community. They also need more private partners other than BRF. They want to be more active in the schools to connect with the community.
- Mapping: Trash is the main problem in São Paulo and the community has acknowledged that. There is an active health center that identifies diseases in the community and maps the concentrations of those diseases. They plan to map other difficulties and the consequences they bring to create a plan of action.
- Building Networks: There is a great opportunity to build the public-private partnership in São Paulo. They are working to inform the public so the public can become involved. They would like the public's involvement because they need long-term engagement as well as alignment on goals so the program is successful.
- Create an established platform: The education and communication in schools could be more active in São Paulo. They need to improve communications across all partnerships to show the importance of the community.
- Task Force: They will involve the community in planning and taking action to create change.
- Define Leaders: São Paulo will have a networking meeting to identify leaders and involve them.

#### Santa Catarina

- Identify Partnerships: Santa Catarina has already started working with schools and other institutions. They started the process by asking students what issues they see in their community that they would like to fix. Many of the students identified trash as a problem, and they will start with that effort before moving on to other issues the students identified. They need to define the initial trash or recycling product they will focus on collecting and who can collect and dispose of the materials.
- Mapping: Santa Catarina has discussed having schools as collection points, but have not identified all areas.
- Building Network: They have identified Task Forces, but are looking to engage other partners like Mother's Clubs, NGOs, and the City Education Secretary. They are looking to bring the partner network together early to identify the skills and limitations.
- Create an established platform: Santa Catarina has developed some programs for the schools like ecological handicrafts workshop as well as sustainability contests.
- Task Force: They have identified items like electronics and oil to be collected by task forces and need to find specific collection points.

#### Toledo

- Identify Partnerships: Toledo has already been active in the schools, but is looking to expand their network of partners to involve the surrounding community.
- Mapping: Toledo has developed a map showing where all the collection centers are located.

- Creating an established platform: They need to follow up with the educational platform and define Task Forces so they can involve the community more. Toledo has already successfully executed a “Green Market” in the schools for the past three years. This “Green Market” is an opportunity to buy and sell goods and at the same time learn about reusing and recycling products. Each year the participation in the “Green Market” has grown. They are working on incorporating the whole community in this project, not just the schools.

Mr. Lucio Gil, U.S. Consulate General, Rio de Janeiro

Mr. Gil of the US Consulate attended the workshop to hear about the work that is being done by US EPA in association with CEDAPS, Reciclação, and BRF. He acts as a mediator between the U.S. and Brazil in Rio de Janeiro on a number of international issues, including the environment. He is very interested in the work that US EPA is conducting in Brazil and is very supportive of the work and this partnership. He would like to offer his support to the projects in Brazil.

Final Goals and Conclusion of the Meeting, Ms. Katia Edmundo

- Through this workshop, CEDAPS is changing the CARE Roadmap to better align with the Reciclação model. Once the Roadmap is structured with the Reciclação methodology through this workshop, the goal is to bring this model to other communities. Another goal of this workshop is to use the 10 Roadmap Steps and the 5 R’s principles and develop a complete methodology.
- CEDAPS is revising the Roadmap and would like the support of the workshop participants in providing feedback about the Roadmap. They would also like help from participants to identify the process for updating the Roadmap and presenting it at the workshop to define what worked well. In addition, participants should think about how the workshop was structured and whether it could be brought to other communities.
- Ms. Edmundo stressed that it is very important to continue to help each other and communicate with one another. The Reciclação Program partnership wants to create a dialog to better share these ideas.
- Ms. Edmundo reminded participants to take one step at a time when trying to create change in communities.



## Appendix A: Workshop Agenda

Systematization and Development of Reciclação Program Workshop

June, 20<sup>th</sup> a 23<sup>rd</sup>

Art Museum of Rio (MAR) – Rio de Janeiro

Date: June, 20<sup>th</sup> ( Monday afternoon)

Local: Health Promotion Centre (CEDAPS), Rio Branco Avenue, 135 – 6<sup>o</sup>. floor

Time	Title	Speaker	Moderator	Participants
2:00 – 3:00 pm	CEDAPS presentation Reciclação presentation	Kátia Edmundo Cris Prazeres	XXXX	EPA CEDAPS Proa Group BRF Institute
3:00 – 4:30 pm	Agenda revision and facilitation alignment <ul style="list-style-type: none"><li>Detailed agenda</li><li>Work group questions revision</li><li>Facilitation methodology</li></ul>	Melissa Abla	XXXX	
4:30 – 5:00 pm	Coffee-break			
5:00 – 6:00 pm	Welcome and Reciclação Overview	Cris Prazeres Kátia Edmundo		EPA CEDAPS Grupo Proa Instituto BRF BRF
6:00 pm	Happy Hour: Sarau Rio (Mem de Sá Avenue, 64 – Lapa)			

Date: June, 21<sup>st</sup> (Tuesday morning)

Local: Art Museum of Rio, Mauá Square, 5 – Downtown

Time	Title	Speaker	Moderator	Work group question
Contextualização e Introdução				
10:00 – 10:15	Recepção			
10:15 – 10:45	Welcome and Contextualization <ul style="list-style-type: none"> <li>Aha Mural</li> </ul>	Cam Hill-Macon - EPA Marcela Toguti – BRF Kátia Edmundo – CEDAPS Cris Prazeres – Grupo Proa	Kátia Edmundo	XXXX
10:45 – 11:45	Individual presentation and Mural of questions	All participants	Kátia Edmundo	How I am and How I can contribute with this workshop.
11:45 – 12:00	ReciclAção Video			
12:00 – 12:20	CARE presentation and synergy with ReciclAção <ul style="list-style-type: none"> <li>What is CARE?</li> <li>How does it work with organization? What is the RoadMap?</li> <li>Where and how was it applied?</li> <li>How CARE can contribute with ReciclAção?</li> </ul>	Marva King – EPA Danny Gogal - EPA	XXXX	XXXX
12:20 - 12:30	Agenda and working dynamic	Melissa Abla - CEDAPS	Marva King Danny Gogal	XXXX
12:30 - 13:30	Lunch			

Date: June, 21<sup>st</sup> (Tuesday afternoon)

Time	Title	Speaker	Moderator	Work group question
Territory Mapping and mobilization of a partner network				
1:30 – 3:00pm	Identify opportunities and establish opportunities (Step 1) <ul style="list-style-type: none"> <li>Motivation to start a communitary action</li> <li>Different ways to identify and connect different partners</li> </ul>	Charles Siqueira - Polen Institute Marcela Toguti Cris dos Prazeres	Marva King Danny Gogal	What are the motivation to start this initiative? What is going to be changed?
3:00 – 3:30pm	Mapping the territory: vulnerabilities and assets (Step 2) <ul style="list-style-type: none"> <li>Map the waste dump sites</li> <li>Check how waste is disposed</li> <li>Understand the use and disposal of materials in the territory</li> <li>Understand the relation between solid waste and geography of the territory</li> <li>Identify resources to be streamlined</li> </ul>	Pedro Miranda - Rio Resiliente Cris dos Prazeres	XXXX	How much do you know about waste disposal in your territory? What are the problems related to them? How do these problems can be solved or minimized?
3:30 – 4:00pm	Coffee-break			
4:00 – 4:30pm	Mapping the territory: vulnerabilities and assets (Step 2) <ul style="list-style-type: none"> <li>Map the waste dump sites</li> <li>Check how waste is disposed</li> <li>Understand the use and disposal of materials in the territory</li> <li>Understand the relation between solid waste and geography of the territory</li> <li>Identify resources to be streamlined</li> </ul>	XXXX	Marva King Danny Gogal	What are the resources or other Technologies that can be use in your territory? How is the waste treatment in its territory?
4:30 - 5:30pm	Constitute a partners network (Step 3) <ul style="list-style-type: none"> <li>What are the partners who must be attracted by this initiative</li> <li>What are the reasons to stablish a network of partners</li> <li>How to keep active the network of partners</li> <li>Operating Ways of Working Group</li> </ul>	Cris dos Prazeres Kátia Edmundo		In addition to the mentioned partners, which others are important to keep the initiative? How do these partners should be attracted? How should we keep this network active?
5: 30 - 6:00pm	Key findings of the day <ul style="list-style-type: none"> <li>AHA Mural</li> </ul>		Marva King Danny Gogal	

Date: June, 22<sup>nd</sup> (Wednesday morning)

Time	Title	Apresentação	Moderator	Work group question
Socio environmental education platform; Mutirões and collective actions; Reciclação sustainability				
10:00 – 10:15	Recepção			
10:15 – 11:55	Create and institute environmental education platform (personal and environmental care) (Step 4) <ul style="list-style-type: none"> <li>Inspire others and provide them ways to clean their territory</li> <li>Connect one person to other in different areas and with different perspective</li> <li>Appropriateness of the language campaigns</li> </ul>	Maria Lúcia - Teacher Davi - Municipal Health Secretariat Cris dos Prazeres	Marva King Danny Gogal	What are the strategies and local to promote environmental education actions? What are the guidelines and contents Quais diretrizes e conteúdos a serem trabalhados (beliefs, habits)? What are the communication tools?
11:55 – 1:15	Lunch			
1:15 – 2:30pm	Mutirões and collective actions (Step 5) <ul style="list-style-type: none"> <li>Focus on the result of the action and on the collective action - connection</li> <li>Promote the improvement of the environment</li> <li>Be an example and encourage participation</li> </ul>	Jussara Macedo - Municipal Conservation Secretariat Cris dos Prazeres	Marva King Danny Gogal	What are the actions can be taken in your territory to mobilize the residents? What consequences of collective actions should be explored?
2:30 – 4:00pm	Involve family as protagonist of the action (Step 6 ) <ul style="list-style-type: none"> <li>Delivering the recycling material the resident becomes the protagonist of the action</li> <li>Change of perspective : From garbage to solid waste</li> </ul>	Soraia – Social Assistance of Coexistence and Strengthening Ties Cris dos Prazeres Kátia Edmundo	Marva King Danny Gogal	Who is the protagonist of your initiative? What are the strategies and actions to involve the protagonist?
4:00 – 4:30pm	Coffee-break			
4:30 – 6:00pm	Reciclação sustainability (Step 10) <ul style="list-style-type: none"> <li>Results communication</li> <li>Use of the sale resource and funding raising</li> <li>Articulation with public services</li> </ul>	Kátia Edmundo Marva King (funding raising)	Marva King Danny Gogal	

Date: June, 23<sup>rd</sup> (Thursday morning)

Time	Title	Speaker	Moderator	Work group question
Reciclação operation and logistics				
10:00 – 10:15	Recepção			
10:15 – 12:15	Implement, manage and boosting the collection points <ul style="list-style-type: none"> <li>• Create arguments that make the collection points valuable for the community</li> <li>• Ways that enables a cleaner environment.</li> <li>• Identify the best places to install the collection points.</li> <li>• Appropriation of bags by residents.</li> <li>• Participatory consultation as a means of identification of central points / recognition of residents to identify the bags implantation sites (commercial, reference people)</li> </ul>	Moabe – COMLURB Galdino - COMLURB Marianna Gomes – Proa Group	Marva King Danny Gogal	What equipment to use? Which place to install? What furniture - ENP, container, space? Always consider your geography.
12:15 – 13:15	Lunch			
13:15 – 15:15	Define and manage the operation <ul style="list-style-type: none"> <li>• Identify and qualify human resources</li> <li>• Withdrawal of collection points, separation, storage, weighing, selling</li> </ul>	Edson Freitas - EccoVida Cris dos Prazeres	Marva King Danny Gogal	
15:15 – 16:00	Wrap-up <ul style="list-style-type: none"> <li>• Answer the mural of questions</li> <li>• AHA Mural</li> <li>• Goals achieved</li> <li>• Next steps</li> </ul>	Kátia Edmundo		How you intend to use the achieved teachings?
16:00 – 16:30	Coffee-break			
16:30 – 18:00	Partners meeting: Reciclação Update			

## Appendix B: Action Plan

### PLANO DE AÇÃO

Passo	Exemplo Reciclação Morro dos Prazeres	Em que ponto estamos	Ações para avançar
1. Identificar oportunidades e estabelecer parcerias para INICIAR	BRF + Cedaps + Grupo Proa = desejos e interesses alinhados Construção coletiva e responsabilidades compartilhadas ao longo de um ano		
2. Mapear o território: vulnerabilidades e ativos	Mapeamento Digital liderado pela juventude Consulta participativa Lixo identificado como principal problema		
3. Constituir uma rede de parceiros para AVANÇAR	Atração de diferentes atores (públicos e privados) Estabelecimento de termo de parceria Desafios na dinamização do Grupo de Trabalho ao longo do tempo		
4. Criar e instituir plataforma de educação socioambiental	<ul style="list-style-type: none"> <li>Despertar o desejo do outro e dar subsidio e meios para que o ambiente mais limpo possa ser feito por cada um.</li> <li>Conectar pessoa a pessoa com diferentes áreas e em diferentes perspectivas.</li> <li>Adequação da linguagem das campanhas</li> </ul>		
5. Mutirões e ações coletivas	<ul style="list-style-type: none"> <li>Focar tanto no resultado do trabalho como na ação coletiva – conexão</li> <li>Dinamizar a transformação do ambiente</li> </ul> <p>Servir como exemplo e motivar a participação</p>		

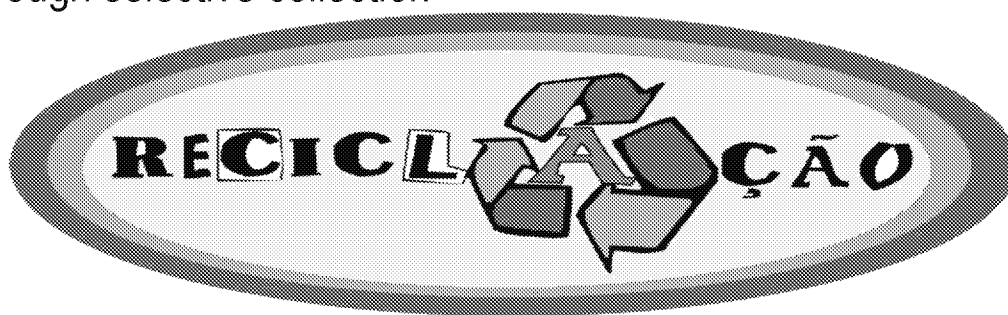
Passo	Exemplo Reciclação Morro dos Prazeres	Em que ponto estamos	Ações para avançar
6. Envolver a família como protagonista da ação	<ul style="list-style-type: none"> <li>• Morador é o protagonista da ação ao entregar voluntariamente seu resíduo</li> <li>• Mudança de perspectiva - do lixo para o resíduo</li> </ul>		

# ReciclAção



## Program

Guide for the implementation of an environmental education platform focused on the territorial development and promotion of health through selective collection



Rio de Janeiro, 2016



# Introduction

The challenges posed by the increasing production of waste imposed on the public, private agents and society's joint efforts in the search for effective solutions. Proposals that provide a response to the environmental and social emergencies in a single instrument, gain prominence in the agenda, because they mean the possibility of mitigating impacts and the promotion of a social welfare in a more effective and integrated manner. The National Policy on Solid Waste (PNRS, Política Nacional de Resíduos Sólidos, Law No. 12,305), enacted in August 2010, has these characteristics and entails the opening of paths for creating innovative practices that set themselves the task of tackling this problem. It is in this context that the Reciclação program appears.

In 2012, three years before the initiative was recognized as a Social Technology by the Bank of Brazil Foundation, the Reciclação was being designed collectively with a focus on the priorities of the territory, according to the priorities set by its residents. At that time, motivated by the need to adapt to the PNRS, but with a desire to go beyond what was obligatory, the BRF Institute sought partners who felt motivated to collectively create a virtuous cycle of local development and promotion of health based on waste, which quickly would transform into a resource to be reinvested in the locality.

From this invitation, a partnership with the Center for the Promotion of Health (CEDAPS, Centro de Promoção da Saúde) and the Group Prevention Carried Out with Organization and Love (PROA, Prevenção Realizada com Organização e Amor) was established. The former, a non-governmental organization that develops methodologies, projects and processes together with grassroots communities for the improvement of the conditions and quality of life of the residents, building local solutions associated to public policies in the territory. The latter, a community-based organization located and operating in Morro dos Prazeres, Rio de Janeiro, in order to promote actions aimed at promoting health and improving the quality of life for the residents of the territory.

With the proposal of an early Reciclação, 2013 was the time to implement the planned actions and verify the consistency of what had just been built. Morro dos Prazeres was the territory chosen to receive this demonstration project, which has proved a powerful methodology to reduce environmental risks, the promotion of health and of the territorial development. Concrete proof of this is the conclusion of a Technical Cooperation Agreement between the initiative and the United States Environmental Protection Agency (US EPA), signed in 2015, within the scope of the US-Brazil Joint Initiative on Urban Sustainability<sup>1</sup>.

Among the desired objectives in this partnership is to promote that the project can be applied again through the development of lessons learned and the systematizing of information. It is based on that proposal that this Guide was conceived. Based on the experience of three years of Reciclação and the result of a collective work of multi-sector partners, this document has as their main objective to inspire and direct organizations, private or public in nature, to develop their own selective collection program, always bearing in mind the motivation and public participation and the return to the collective.

This document contains four parts, besides this introduction: (i) the first one, is our time line. This is a brief historical review of the Reciclação, based on decision-making, which will enable the reader to understand the process of construction which the initiative underwent; (ii) the five Rs of the Reciclação, which are the principles that govern and must be present wherever it is taken; (iii) the ten steps to implement the Reciclação, which will guide the reader on how

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<sup>1</sup> US-Brazil Joint Initiative on Urban Sustainability (JIUS)

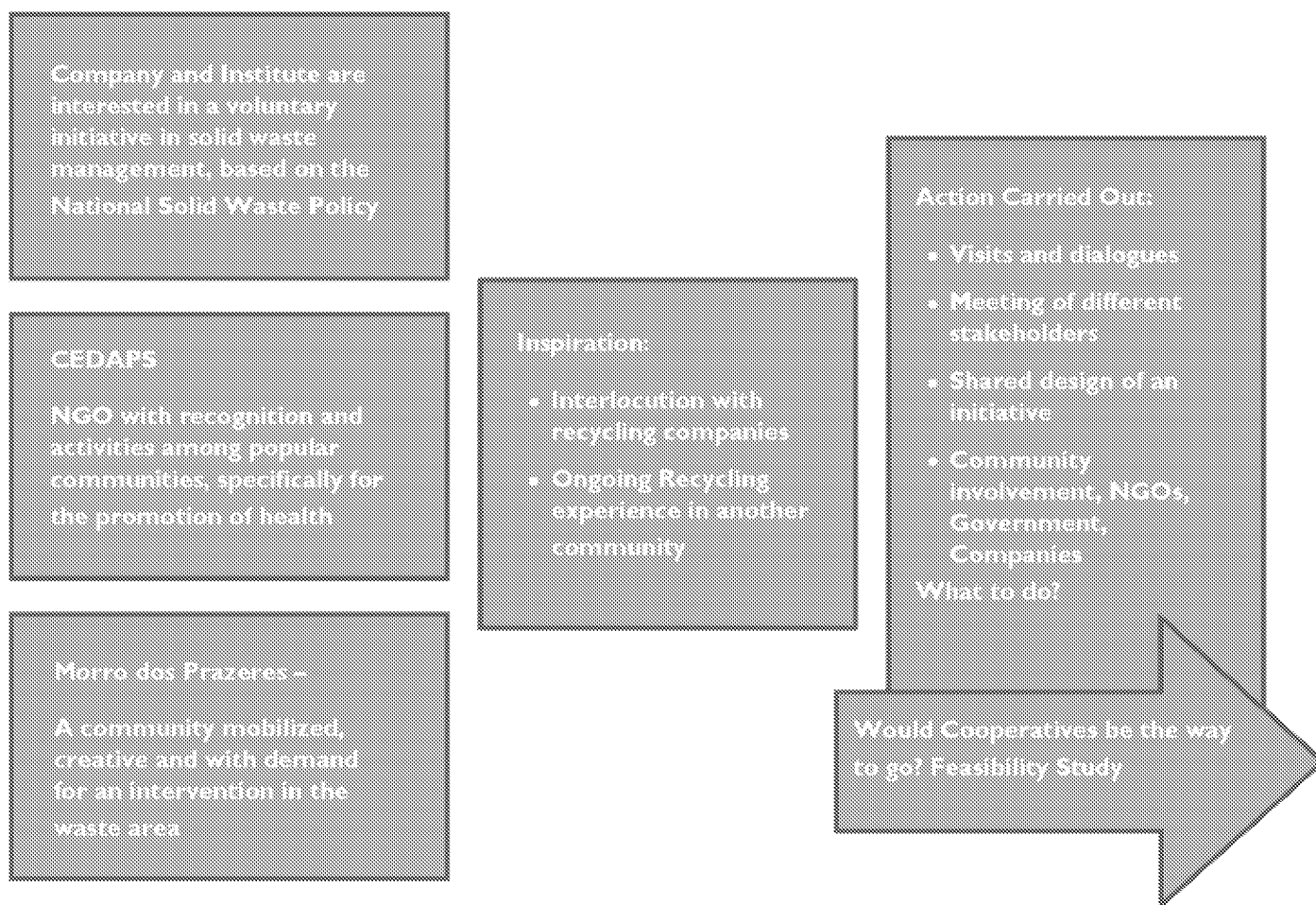
to proceed with the implementation of the project, without disregarding their reality and local demands. Beside each step presented, in boxes, the Morro dos Prazeres experience will also be presented, in order to inspire your initiative; (iv) finally, some possibilities of implementation of the initiative are presented considering the institution that promotes it, that is, seeking to answer the question of how is the Reciclação start initiated from an elementary school, or a private company, or, a community-based organization or public body.

We hope you enjoy reading it and wish you every success in your new venture.

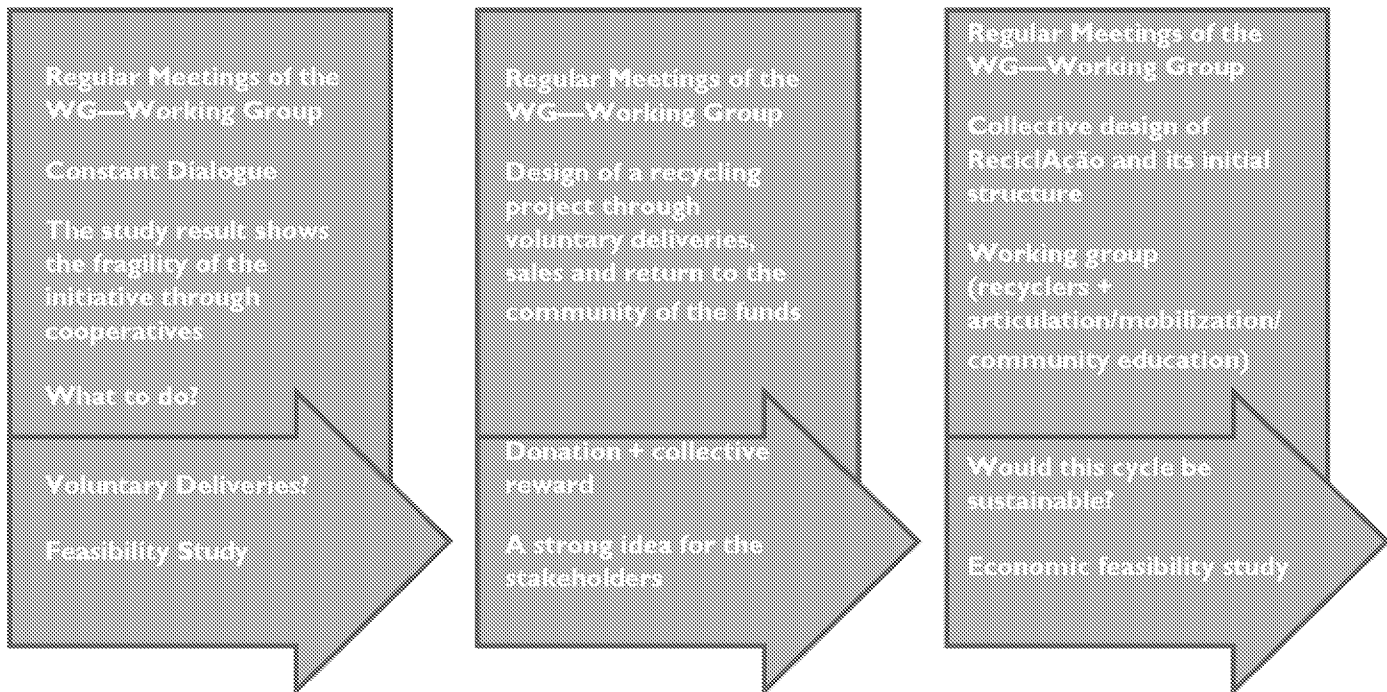
### Reciclação Time Line: Decision Making

To be built, the Reciclação underwent a decision-making process that resulted in its current form of operation in order to achieve the objectives for which it was proposed. To bring the initiative closer to you and illustrate our experience, we have consolidated, in three stages, the process carried out. We believe that by presenting this content we will facilitate or at least inspire you in your own decision-making and will increase your understanding of this initiative.

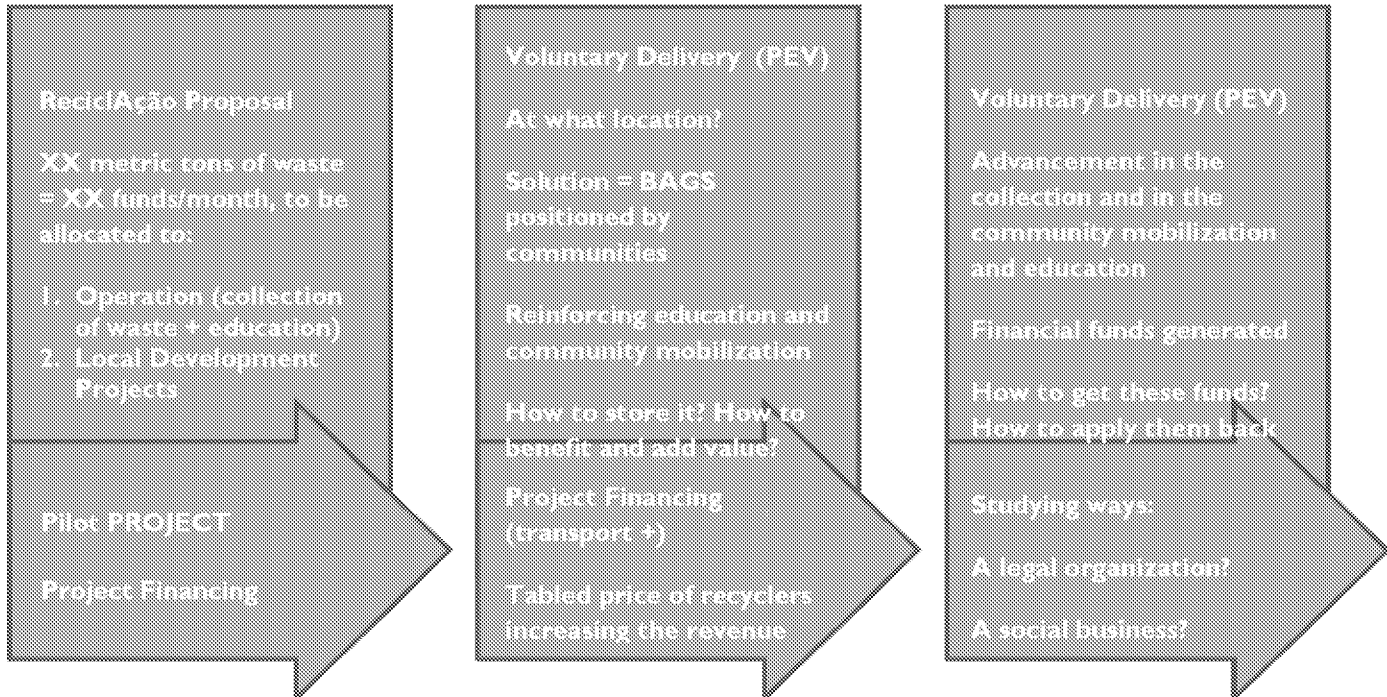
- **Step I: Meeting of different organizations with the same challenge to be overcome (3 months)**



- **Stage II: Construction of action scenarios and feasibility studies through constant dialogue between the stakeholders involved (6 months)**



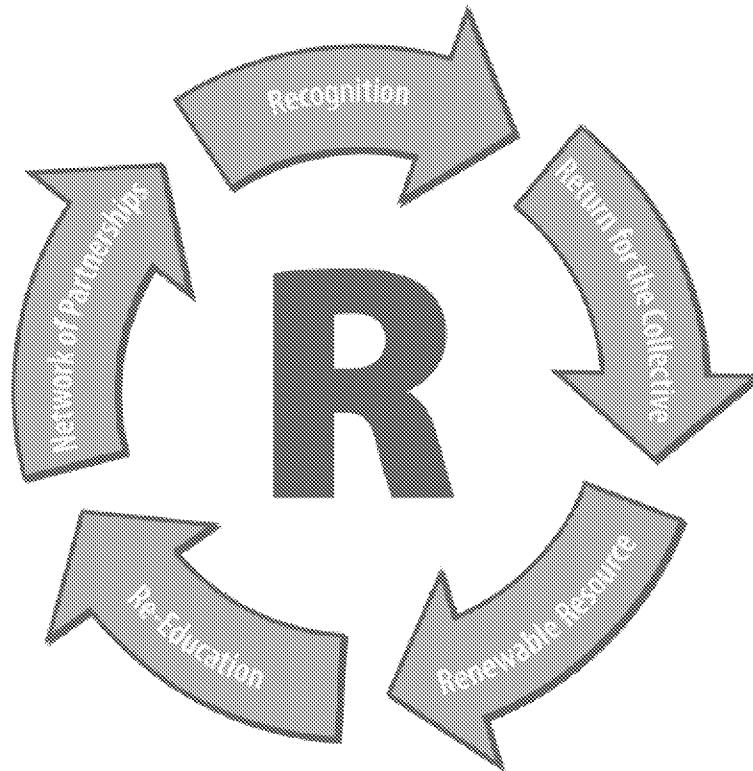
- **Etapa III: Feasibility study of the proposal designed and sustainability of the initiative (3 months) – seeing how to present the result of this stage which is not yet defined in the demonstration project...**



The Reciclação Principles: The Five Rs (the five principles to be detailed)

The Reciclação principles are the basis on which its practice is based, or even, the values governing the initiative in order to make it particularly unique. The set of principles, as provided in the initiative, extend the chances of achieving the expected results: local development and the promotion of health.

They are presented in five Rs, as explained below:



**Recognition:** Waste as a problem and, from it, a proposed solution that involves the selective collection and recycling.

**Network of partnerships [Rede de parcerias]:** Necessary to promote the process. These are internal partnerships, considering all the dynamics of the territory. Complementing this, it is important to formalize external partnerships: schools, health centers. The network principle is intersectoral, open and continuous. That is, it is capable of including new partnerships that can be added to the process.

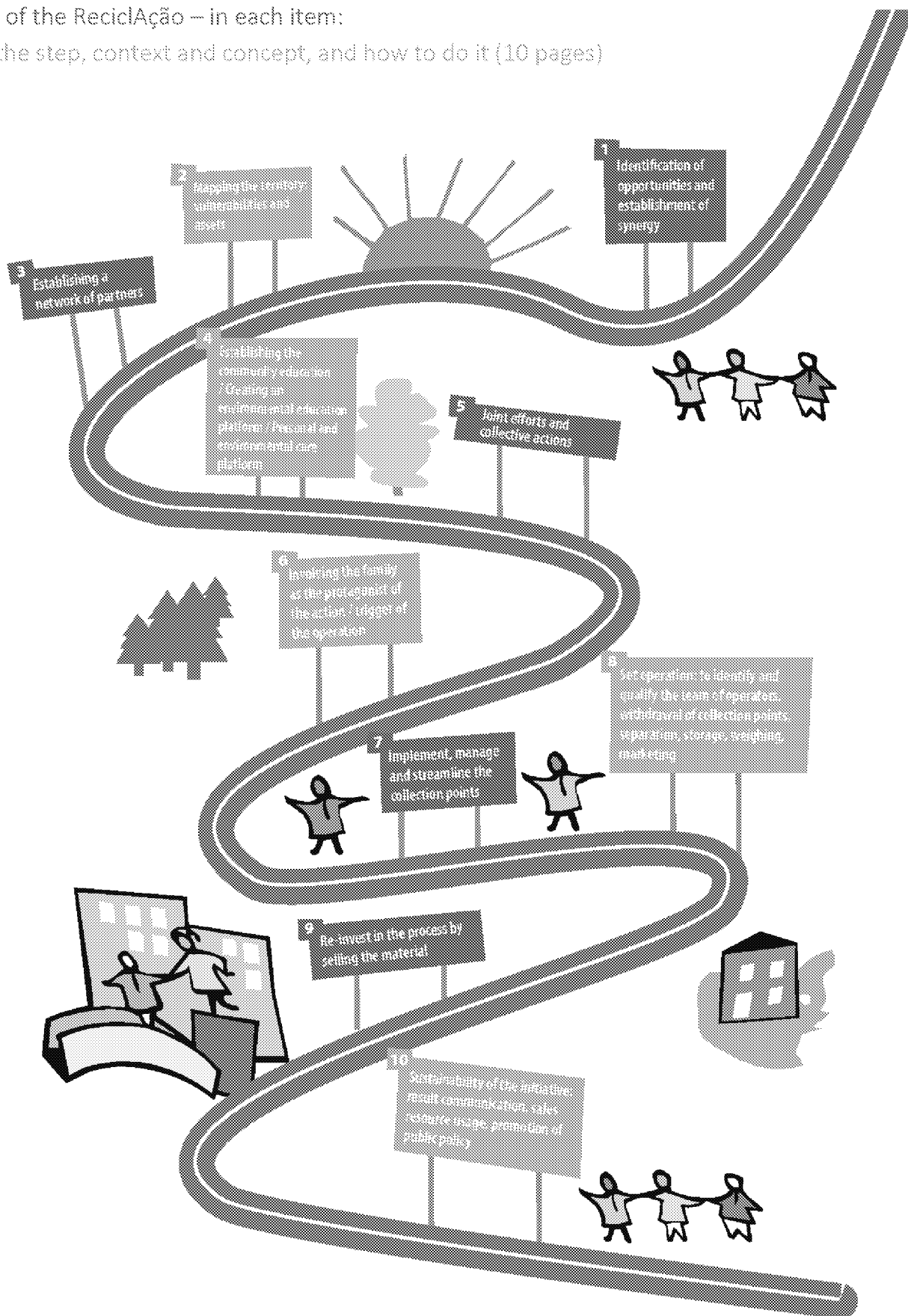
**Reeducation:** Construction of an environmental education platform guided by the promotion of health and collective actions. This reeducation is on concepts and, above all, practices and examples. The idea is to work with this movement.

**Return to the community:** The Reciclação treats the generation of income as a means, as a process. However, the most important proposal is to encourage a return to the community. This means that the invite to be extended to the population is for the common good, it is based on a shared value.

**Renewable Resource:** Concept of recycling + financial funds and the possibility of feed-back in the cycle. The funds obtained by the sale of the material returns to the territory

10 Steps of the ReciclAção – in each item:

What is the step, context and concept, and how to do it (10 pages)



## 1 Identification of opportunities and establishment of synergy

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8 Defining the operation: identifying and training the team of operators, withdrawal from the collection points, separation, storage, weighing, commercialization

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# Annex – Synopsis of Morro dos Prazeres

## EPA Points:

- If it is a digital guide it can be multimedia – with video links
- Include the illustrations we want
- Check the logos that appear on the guide



